COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

PACAFI16-1201,CL-2
BY ORDER OF THE COMMANDER, PACIFIC AIR FORCES
PACAF INSTRUCTION 16-1201, CHECKLIST-2
7 APRIL 2000
Operations Support
PARACHUTE PROCEDURES BRIEFING GUIDE/CHECKLIST – PARARESCUE
OPR: HQ PACAF/DOTV (MSgt Kevin S. Jones)
Certified by: HQ PACAF/DOT (Col Thomas Poulos, Jr.)
Pages: 72/Distribution: F

This checklist prescribes Pararescue tasks and briefings associated with parachuting operations. It is to be used as a compliment for the applicable chapters of the basic PACAF Instruction 16-1201, Air Force, and other service guidance. This checklist implements AFPD 16-12, Operations Support, Pararescue. Formatted copies for official Air Force checklist binders of size 4 ½" X 7" can be obtained from the HQ PACAF/DOTV web page at http://www.cidss.af.mil/dotv/homepage.taf?show=dotv. Units may also request electronic versions to be sent to them by HQ PACAF/DOTV. This checklist is applicable to PACAF gained Air National Guard (ANG) Pararescuemen. This checklist does not apply to US Air Force Reserve (USAFR) units and members.

PARACHUTE EMPLOYMENT AIRCREW BRIEF
(Brief applicable items only)

1. Insertion Information
- 1.1. Number of aircraft involved, call sign(s)
- 1.2. Type of drop (S/L, HALO, HAHO, Tandem)
  - 1.2.1. Pattern (Number of planned passes including streamer drops)
  - 1.2.2. Type of release (JMDD-NAV Directed)
  - 1.2.3. Type of exit (Left/Right Door, Ramp)
  - 1.2.4. Aircraft configuration requirements
- 1.3. Altitude
    - 1.3.1. Training Minimums (Do not brief, for jumpmaster's' information only)
    - 1.3.1.1. Parabolic/Round parachute – 1000' AGL when weather is a factor
    - 1.3.1.2. Parabolic/Round parachute – 800' AGL w/Command Decision Risk Assessment (table 15-2 from TO 14D1-2-1-121)
    - 1.3.1.3. Aircraft with a drop speed of 90 knots or less – 1500' AGL
    - 1.3.1.4. Aircraft with a 90 to 110 knot drop speed – 1250' AGL
    - 1.3.1.5. Static line square pack opening – 2500' AGL
    - 1.3.1.6. Free fall square pack opening
      - 1.3.1.6.1. Water – 2500' AWL
      - 1.3.1.6.2. Land – 3000' AGL
    - 1.3.1.7. AOD activation – 2500' AGL
    - 1.3.1.8. Minimum AOD safe arming altitude – 2500' above activation altitude. **NOTE:** Recommended 3500' above
  - 1.3.2. Maximum S/L operations – 13,000' MSL (Do not brief, for jumpmaster's' information only)
- 1.4. Airspeed. **NOTE:** Aircraft speed versus parachute opening limitations will be reviewed
  - 1.4.1. HC-130 – 125 KIAS standard for personnel deployment (MOS is absolute minimum)
  - 1.4.2. C-130 – 130 KIAS minimum
  - 1.4.3. C-141 – 130 to 135 KIAS minimum
  - 1.4.4. H-60 – 65 KIAS minimum and 75 knots maximum (optimum 70 knots)
  - 1.4.5. H-1 – 50 KIAS minimum and 70 knots maximum (optimum 70 knots)
  - 1.4.6. CH-53 (USMC) – 80 KIAS minimum and 110 knots maximum (optimum 90 knots)
  - 1.4.7. MC1-1C parachutes – 135 KIAS maximum

2. Team/Equipment Information
- 2.1. Number of Jumpers/Bundles
- 2.2. Call signs. (Team, Individuals)
- 2.3. Duty codes
- 2.4. Physiological Training Officer/Oxygen NCO

3. Route of Travel: (HAHO only)
- 3.1. Pull altitude
- 3.2. Intended route of travel. (Show on map)
- 3.3. Primary DZ. (Show on map)
- 3.4. Emergency DZ(s). (Show on map)
- 3.5. Hazards near DZ and Emergency DZ(s) (Show on map)

4. DZ Information: (Use DZ survey if available)

4.1. Primary/Alternate DZ (Show on map)

4.1.1. DZ Name or UTM Coordinates

4.1.2. Markings and features

4.1.3. Recognition symbol

4.1.4. DZ/LZ controller call sign

4.1.5. TOT

4.1.6. Release point

4.2. Mission abort time

5. Communications

5.1. Radio Type and Frequencies (Primary/Alternate)

5.2. Cell Phone Number(s) (If available)

5.3. Visual signals (Day)

5.3.1. CLEAR TO JUMP

5.3.1.1. Land – Target displayed

5.3.1.2. Water – Target displayed, boat circling off wind line

5.3.2. NO DROP THIS PASS

5.3.2.1. Land – Target removed

5.3.2.2. Water – Boat positioned at target or stationary in water

5.3.3. JUMP CANCELED

5.3.3.1. Land – Target removed and replaced with two crossed streamers forming an "X"

5.3.3.2. Water – Target removed

5.3.4. EMERGENCY NO DROP/INJURED JUMPER – Red smoke/flare

5.4. **NOTE:** Air/Ground radio communication is required for all night deployments unless waived by the PJ Superintendent

6. Equipment available/required

6.1. Mission Equipment: (Weight)(Personal, RAMZ, Parabundles)

6.2. DZ Equipment (Training Only)

7. Post Insertion Information

7.1. Team Actions on DZ/LZ (Primary/Alternate)

7.1.1. Establish Contact with aircraft

7.1.2. Relay condition of team/equipment

7.2. Aircraft Support Required

7.2.1. Give headings to objective

7.2.2. Relay radio communications

7.2.3. Coordinate Extraction (location, method, and times)

8. High Altitude Airdrop Procedures

8.1. Physiological Technician Requirements and Briefing (Required at or above 18000' MSL, AFI 11-409)

8.2. Oxygen requirements and times

8.3. Aircraft depressurization time (If required)

8.4. Walk around bottles (requirements)
8.5. Procedures for suspected DCS
  8.5.1. Immobilize affected area
  8.5.2. Place patient horizontal
  8.5.3. Administer 100% oxygen
  8.5.4. Cabin Altitude to sea level, or field elevation of evacuation site
  8.5.5. Advise flight surgeon at operating location of situation and coordinate treatment actions
  8.5.6. Fly to nearest facility with a flight medical officer (military or civilian) if situation is an IFE
  8.5.7. Fly to nearest hyperbaric treatment facility
  8.5.8. Monitor and record vital signs and all symptoms
8.6. Waiver (Airdrops above 25,000' MSL)

9. Next Checklist – Aircrew Emergency Procedures
9.1. Static Line – Page 7
9.2. Free Fall – Page 12

AIRCREW EMERGENCY PROCEDURES
STATIC LINE
(Brief applicable items only)

1. Emergency Parachutist Bail Out Procedures (After Jumpers Stand Up and Hook Up)

1.1. Under acceptable conditions, pilot maintains altitude and attitude to evacuate the jumpers
1.2. Evacuation is ordered by green light/briefed alarm bells/signals
1.3. Minimum acceptable altitude is 400' AGL for Fixed-wing, 1000' AGL for Static Line Square parachutes and Rotary-wing aircraft
1.4. Emergency occurs during unacceptable conditions
1.4.1. No-drop signal given
1.4.2. Red lights turned "ON"
1.4.3. Jumpers unhook static lines
1.4.4. Take seats and fasten safety belts
1.4.5. Prepare for crash landing or ditching

2. Inadvertent Pilot Chute Deployment

2.1. Contain pilot chute in the aircraft
2.2. Yell "PILOT CHUTE"
2.3. Move away from exits
2.4. De-rig and secure jumper and equipment
2.5. Exit immediately if any part of the parachute system is pulled outside of aircraft

3. Towed Parachutist – Fixed Wing

3.1. Stop the stick (JM)
3.2. Notify the pilot (LM)
3.3. Red lights turned "ON" (CP)
3.3. Notify the DZ
3.4. Maintain drop airspeed
3.5. Maintain at least the minimum drop altitude (AGL)
3.6. Avoid flying over water or built up areas
3.7. If jumper is SCUBA equipped, avoid flying over land
3.8. Identify how the jumper is being towed
3.9. If towed by anything other than the static line, the jumpmaster/safetyman will attempt to free the jumper
3.10. Towed parachutist indicates conscious/usable reserve
3.10.1. Indicated by tight body position with both hands on reserve
3.10.2. Static Line Square – Indicated by tight body position with one hand protecting cutaway handle and one hand protecting reserve ripcord
3.11. If towed by static line, jumpmaster/safety recommends to AC whether to retrieve or cut free
3.12. AC decides if and when the parachutist is cut free

WARNING: Do not deploy reserve parachute until clear of the aircraft. For SL square: Do not cutaway and deploy reserve parachute until clear of the aircraft

3.13. HC-130 – If towed from paratroop door, the aircraft should

3.13.1. Avoid turning in direction of parachutist
3.13.2. All turns should be shallow and coordinated
3.14. C-130 (Generic) – If towed from paratroop door, the aircraft should
3.14.1. Set flaps to 100 percent

WARNING: Other factors may determine a flap setting between 50 and 100 percent

3.14.2. Lower landing gear
3.14.3. Avoid turning in direction of parachutist
3.14.4. All turns should be shallow and coordinated
3.15. Tow priorities
3.15.1. Door: First – Retrieve
Second – Cut Free
3.15.2. Ramp: First – Cut Free
Second – Retrieve

WARNING: Retrieve the parachutist if unconscious, has an unusable reserve, does not signal, cannot be observed, or cannot be cut free

4. Towed Parachutist – Rotary Wing
4.1. Stop the stick (JM)
4.2. Notify the pilot (JM/Safetyman)
4.3. Notify the DZ
4.4. Maintain drop airspeed
4.5. Maintain at least the minimum drop altitude (AGL)
4.6. Avoid flying over water or built up areas
4.7. If jumper is SCUBA equipped and conscious, avoid flying over land
4.8. Recover and store all deployed static lines and deployment bags (JM/Safetyman)
4.9. Identify how the jumper is being towed
4.10. If towed by anything other than the static line, the jumpmaster/safetyman will attempt to free the jumper
4.11. Towed parachutist indicates conscious/usable reserve
4.11.1. Indicated by tight body position with both hands on reserve
4.11.2. Static Line Square – Indicated by tight body position with one hand protecting cutaway handle and one hand protecting reserve ripcord
4.12. If towed by static line, jumpmaster/safety recommends to AC whether to land or cut free
4.13. AC decides if and when the parachutist is cut free

WARNING: Do not deploy reserve parachute until clear of the aircraft. For SL square: Do not cutaway and deploy reserve parachute until clear of the aircraft

4.14. Tow priorities
First – Land
Second – Cut Free
4.15. Descend slowly to DZ/suitable landing site
4.16. Establish a hover

4.17. Lower jumper to the ground

WARNING: Unconscious jumper will not be lowered into water

4.18. Unhook jumper's static line, deplane, and detach towed parachutist (JM/Safetyman)
4.19. If jumper is cut free, attempt to release over center of DZ

5. Malfunction/Injury/Unplanned Exit/Towed Jumper Cut Free Procedures (Aircrew)

5.1. Air/ground activities directed to support jumper
5.2. Track parachutists' descent
5.3. Monitor his condition
5.4. Relay his position to DZ controller
5.5. Deploy additional jumper(s) as briefed

6. Next Checklist

6.1. LM/Safetyman Duties Brief – Page 14
6.2. DZC/DZSO/Malfunction Officer Duties Brief – Page 16
6.3. Team Member Equipment Checklist
6.3.1. Round – Page 19
6.3.2. Static Line Square – Page 22

AIRCREW EMERGENCY PROCEDURES
FREE FALL
(Brief applicable items only)

1. Emergency Parachutist Bail Out Procedures
- 1.1. Coordinate opening/closing aircraft exits
- 1.2. 1000' AGL (Tandem – 1500') and below
  - 1.2.1. Take aircraft seats and fasten seat belts
  - 1.2.2. Prepare for crash landing or ditching
  - 1.2.3. Egress as directed by aircrew/jumpmaster
- 1.3. 1000 – 2000' AGL (Tandem – 1500 – 4000' AGL)
  - 1.3.1. Exit on jumpmaster command, with pilot's concurrence
  - 1.3.2. Deploy reserve parachute once clear of the aircraft
  - 1.3.3. Attempt to land with other jumpers
- 1.4. 2000' AGL and above (Tandem – 4000' and above)
  - 1.4.1. Exit on jumpmaster command, with pilot's concurrence
  - 1.4.2. Deploy main parachute (Tandem – Drogue) once clear of aircraft (5-second maximum delay)
  - 1.4.1. Attempt to land with other jumpers

2. Inadvertent Pilot Chute Deployment
- 2.1. Contain pilot chute in the aircraft
- 2.2. Yell "PILOT CHUTE"
- 2.3. Move away from exits
- 2.4. De-rig and secure jumper and equipment
- 2.5. Exit immediately if any part of the parachute system is pulled outside of aircraft

3. Malfunction/Injury/Unplanned Exit Procedures (Aircrew)
- 3.1. Air/ground activities directed to support jumper
- 3.2. Track parachutists' descent
- 3.3. Monitor his condition
- 3.4. Relay his position to DZ controller
- 3.5. Deploy additional jumper(s) as briefed

4. Automatic Ripcord Release
- 4.1. Type
- 4.2. Desired/Minimum arming altitude
- 4.3. Notification procedures for emergency descent
- 4.4. Premature firing (Same as inadvertent pilot chute deployment)

5. Next Checklist
- 5.1. LM/Safetyman Duties Brief – Page 14
- 5.2. DZC/DZSO/Malfunction Officer Duties Brief – Page 16
- 5.3. Team Member Equipment Checklist
  - 5.3.1. Free Fall Square – Page 26
  - 5.3.2. AMF – Page 31
- 5.4. Tandem Passenger Brief – Page 33

LM/SAFETYMAN DUTIES BRIEF
(Brief applicable items only)

1. Keep working area clear of non-essential equipment

2. Type of exit (Left/Right Door, Ramp)

3. Cabin lighting/configuration

4. Intercom requirements

5. H-1/H-60: Insure all seat/gunners/alternate loading belts are free from jumpers and stowed prior to deployment

6. Position on jumper's exit

7. Monitor static lines

8. Relay visual signals (course corrections, clear to jump, no drop)

9. Advise pilot of jumper(s) exit

10. Advise pilot of condition of jumpers ("good chute" or "malfunction")

11. Advise pilot when clear to turn. NOTE: On helicopters recover static lines prior to giving turn clearance (JM/Safetyman)

12. Oxygen console turn off procedures

13. Equipment delivery

14. Recovery of personnel/equipment

15. Other assistance required

16. Other safety considerations

DZC/DZSO/MALFUNCTION OFFICER DUTIES BRIEF
(Brief applicable items only)

1. Number of jumpers

2. Type of drop (Static Line/HALO/HAHO/Tandem)

3. Primary DZ (Show on map)

4. Emergency DZ/LZ(s) (Show on map)

5. Times
- 5.1. On station
- 5.2. Aircraft TOT
- 5.3. Jumpers TOT (HAHO)
- 5.4. Abort time

6. Communications
- 6.1. Call signs
  - 6.1.1. DZ
  - 6.1.2. Aircraft
  - 6.1.3. Jumpers
- 6.2. Type radio's (Primary/alternate)
- 6.3. Frequencies (Primary/alternate)
- 6.4. Listening time(s)
- 6.5. Contact procedures
- 6.6. Cell Phone Number(s) (If available)
- 6.7. Recognition symbol
- 6.8. Visual signals (Day)
  - 6.8.1. CLEAR TO JUMP
    - 6.8.1.1. Land – Target displayed
    - 6.8.1.2. Water – Target displayed, boat circling off wind line
  - 6.8.2. NO DROP THIS PASS
    - 6.8.2.1. Land – Target removed
    - 6.8.2.2. Water – Boat positioned at target or stationary in water
  - 6.8.3. JUMP CANCELED
    - 6.8.3.1. Land – Target removed and replaced with two crossed streamers forming an "X"
    - 6.8.3.2. Water – Target removed
  - 6.8.4. EMERGENCY NO DROP/INJURED JUMPER – Red smoke/flare
- 6.9. **NOTE:** Air/Ground radio communication is required for all night deployments unless waived by the PJ Superintendent
- 6.10. **NOTE:** Separate radios may be required to communicate with both the aircraft and the jumpers

7. Wind limitations (In knots)
- 7.1. AF Static Line (Land) – 13

7.2. AF Static Line (Water) – 25
7.3. AF Square (Land) – 17
7.4. AF Square (Water) – 25
7.5. AF Intentional Tree Jumps – 22
7.6. AF CDS – 17
7.7. AF CDS using G-12 parachutes – 13
7.8. AF CDS using G-13/14 parachutes – 20
7.9. Catching Tandems – 10

8. Equipment
8.1. DZ Kit
8.1.1. Malfunction Officer Equipment
8.1.2. Wind meters
8.1.3. Panels/Lights
8.1.4. Pyrotechnics
8.1.5. Streamers
8.1.6. Spare radio batteries
8.2. Medical Equipment Required
8.2.1. Litter
8.2.2. Medical Kit
8.2.3. Mast Trousers
8.2.4. Spine Board
8.2.5. Oxygen
8.2.6. Other
8.3. Parachute Bags
8.4. Water Jug
8.5. Tree Extraction Equipment
8.6. Night drops
8.6.1. NVGs
8.6.2. Compass
8.6.3. DZ Lighting and discipline

9. Malfunction/Injury Procedures
9.1. Treatment of injured takes priority over other DZ activities
9.2. Advise aircraft of jumpers status and evacuation requirements
9.3. DZC/DZSO/Malfunction Officer duties will be IAW AFJ 13-210(J)

10. Boat and Safety Swimmer Requirements (Water)

TEAM MEMBER EQUIPMENT CHECKLIST
(ROUND)
(Brief/Inspect applicable items only)

1. Main Parachute
- 1.1. Serviceable
- 1.2. Inspection/repack dates – Current
- 1.3. Harness
- 1.4. Risers – Straight and connected
- 1.5. Static line breakcord tie – Routed through static line loop and safety pin attached to static line snap hook

2. Reserve Parachute
- 2.1. Serviceable
- 2.2. Inspection/repack dates – Current
- 2.3. Pins and cones – Checked
- 2.4. Pack opening bands – Installed
- 2.5. Safety pin – Installed

3. Delivery Containers
- 3.1. Load Harness – Serviceable
- 3.2. Lowering Line – Attached
- 3.3. Flotation Devices

4. Medical Equipment
- 4.1. Individual
- 4.2. Team
- 4.3. Controlled Medications

5. Communications Equipment
- 5.1. Radio(s): Type, quantity, and frequencies
- 5.2. Communications check
- 5.3. Spare batteries
- 5.4. Rigged for deployment

6. Signaling Devices
- 6.1. Audible – Whistle/Other
- 6.2. Pyrotechnic – MK-13/124/Pen Gun
- 6.3. Visual – Signal Mirror/Flashlight

7. Night Lighting
- 7.1. Strobe light on back of helmet pointing upward
- 7.2. Additional green chemlite on back of helmet (Water)
- 7.3. Red chemlite(s) attached to front of jumper
- 7.4. Equipment load illuminated as required

8. Individual Equipment (Land)
- 8.1. Helmet with visor/goggles
- 8.2. Gloves
- 8.3. Knife
- 8.4. Jump/Tree Suit
- 8.5. Tree Letdown Webbing

9. Individual Equipment (Water)
- 9.1. Wetsuit/Drysuit
  - 9.1.1. Jacket
  - 9.1.2. Trousers
  - 9.1.3. Hood
  - 9.1.4. Gloves
  - 9.1.5. Booties
  - 9.1.6. Fix-E-Palms
- 9.2. Face mask, fins, and whistle
- 9.3. Jumpers flotation device
- 9.4. Divers knife/tool

10. Special Mission Equipment
- 10.1. Weapons, Ammunition, and Pyrotechnics
- 10.2. Combat/Field/Mountain Equipment
- 10.3. NVGs

11. Special Mission Water Equipment
- 11.1. Protective head gear
- 11.2. Snorkel
- 11.3. SPUDS – Gauged and checked
  - 11.3.1. Regulator – Attached
  - 11.3.2. Air valve – ON (Check regulator)
- 11.4. ML-4 Kit
- 11.5. Fanny Pack
- 11.6. Divers watch
- 11.7. Depth gauge
- 11.8. Underwater compass
- 11.9. Underwater flashlight
- 11.10. Shark dart
- 11.11. Weight belt with dive weights
- 11.12. Carabiner(s)
- 11.13. Scissors

12. Next Checklists – Jumpmaster Parachute Insertion Team Brief (Page 37)

TEAM MEMBER EQUIPMENT CHECKLIST
(STATIC LINE SQUARE)
(Brief/Inspect applicable items only)

1. Parachute
- 1.1. Serviceable
- 1.2. Inspection/repack dates – Current
- 1.3. Reserve Ripcord
  - 1.3.1. Handle – In pocket and secure
  - 1.3.2. Cable routing and free travel – Checked
  - 1.3.3. Pins – Checked, ensure cable is on left side of closing loops
  - 1.3.4. Reserve Static-line Ring – Around reserve ripcord cable and above fixed guide ring (Little-ring – Big-ring)
- 1.4. Static Line Assembly
  - 1.4.1. Pins – Checked
  - 1.4.2. Safety pin – Attached
  - 1.4.3. Static line routing
- 1.5. Three ring riser assembly
  - 1.5.1. Connections
  - 1.5.2. Routing
  - 1.5.3. Rings – Rotate
  - 1.5.4. Nylon coated cable – Inspect for damage from end of cable to fabric locking loop
  - 1.5.5. Fabric locking loops – Inspect for damage and twists
- 1.6. Reserve Static Line
  - 1.6.1. Quick Release – Secured
  - 1.6.2. Loop End of Static Line – On brass marine fitting
  - 1.6.3. Static Line – Free and clear of cutaway cable housing
- 1.7. LPU(s) – Secured to waist strap

2. Delivery Containers
- 2.1. Load Harness – Serviceable
- 2.2. Lowering Line – Attached
- 2.3. Water proofing and flotation
- 2.4. Lighting
- 2.5. Fanny Pack – Required for night and water deployments

3. Medical Equipment
- 3.1. Controlled Medications
- 3.2. Team Kit
- 3.3. Individual Kit

4. Communications Equipment
- 4.1. Radio(s) – Type, quantity, and frequencies
- 4.2. Communications check
- 4.3. Spare batteries

4.4. Rigged for deployment

5. Signaling Devices
- 5.1. Audible – Whistle/Other
- 5.2. Pyrotechnic – MK-13/124/Pen Gun
- 5.3. Visual – Signal Mirror/Flashlight

6. Night Lighting
- 6.1. Strobe light on back of helmet pointing upward
- 6.2. Additional green chemlite on back of helmet (Water)
- 6.3. Red chemlite(s) attached to front of jumper
- 6.4. Green chemlite(s) attached to rear of jumper
- 6.5. Equipment load illuminated as required
- 6.6. Altimeter – Chemlite

7. Individual Equipment (Land)
- 7.1. Helmet
- 7.2. Goggles/Visor
- 7.3. Gloves
- 7.4. Altimeter
- 7.5. Jump/Tree Suit

8. Individual Equipment (Water)
- 8.1. Wetsuit/Drysuit
  - 8.1.1. Jacket
  - 8.1.2. Trousers
  - 8.1.3. Hood
  - 8.1.4. Gloves
  - 8.1.5. Booties
  - 8.1.6. Fix-E-Palms
- 8.2. Face mask, fins, and whistle
- 8.3. Jumpers flotation device
- 8.4. Divers Knife/Tool

9. Special Mission Equipment
- 9.1. Weapons/Ammunition/Pyrotechnics
- 9.2. Combat/Field/Mountain Equipment
- 9.3. NVGs

10. Special Mission Water Equipment
- 10.1. Protective head gear
- 10.2. Snorkel
- 10.3. SPUDS – Gauged and checked
  - 10.3.1. Regulator – Attached
  - 10.3.2. Air valve – ON (Check regulator)
- 10.4. ML-4 Kit

10.5. Fanny Pack
10.6. Divers watch
10.7. Depth gauge
10.8. Underwater compass
10.9. Underwater flashlight
10.10. Shark dart
10.11. Weight belt with dive weights
10.12. Carabiner(s)
10.13. Scissors

11. Next Checklists – Jumpmaster Parachute Insertion Team Brief (Page 37)

TEAM MEMBER EQUIPMENT CHECKLIST
(FREE FALL SQUARE)
(Brief/Inspect applicable items only)

1. Parachute
- 1.1. Serviceable
- 1.2. Inspection/repack dates – Current
- 1.3. Ripcords
  - 1.3.1. Handles – In pockets and secure
  - 1.3.2. Cable routing and travel – Checked
  - 1.3.3. Pins – Checked, ensure reserve cable is on left side of closing loops
  - 1.3.4. Reserve Static-line Ring – Around reserve ripcord cable and above fixed guide ring (Little-ring – Big-ring)
- 1.4. Three ring riser assembly
  - 1.4.1. Connections
  - 1.4.2. Routing
  - 1.4.3. Rings – Rotate
  - 1.4.4. Nylon coated cable – Inspect for damage from end of cable to fabric locking loop
  - 1.4.5. Fabric locking loops – Inspect for damage and twists
- 1.5. Reserve Static Line
  - 1.5.1. Quick Release – Secured
  - 1.5.2. Loop End of Static Line – On brass marine fitting
  - 1.5.3. Static Line – Free and clear of cutaway cable housing
- 1.6. AOD
  - 1.6.1. Calibrated
  - 1.6.2. Arming pin – Installed and secure
  - 1.6.3. Reset indicator bars – Aligned
  - 1.6.4. Power cable housing – Routing checked, locking key attached to stiffener plate
  - 1.6.5. Power cable – Does not overlap ripcord cable and rubber pad is pushed against cable housing
  - 1.6.6. Knurled Nut – Tightened with at least three threads showing
  - 1.6.7. Withdrawal Hook – Ensure it is attached to pin and not cable, main ripcord cable on top
- 1.7. LPU(s) – Secured to harness
- 1.8. Altimeter

2. Delivery Containers
- 2.1. Load Harness – Serviceable
- 2.2. Lowering Line – Attached
- 2.3. Flotation Device – Attached and serviceable
- 2.4. Additional Gear, Containers, Fanny pack

3. Medical Equipment
- 3.1. Individual kit
- 3.2. Team kit
- 3.3. Controlled medications

4. Communications Equipment

4.1. Radio(s) – Type, quantity, and frequencies
4.2. Communications check
4.3. Spare batteries
4.4. Rigged for deployment

5. Oxygen Equipment
5.1. Oxygen mask
5.2. CRU 60/43
5.3. Oxygen block
5.4. AIROX-VIII
5.4.1. Quantity (Min 1800psi)
5.4.2. Flow

6. Signaling Devices
6.1. Audible – Whistle/Other
6.2. Pyrotechnic – MK-13/124/Pen Gun
6.3. Visual – Signal Mirror/Flashlight

7. Night Lighting
7.1. Strobe light on back of helmet pointing upward
7.2. Additional green chemlite on back of helmet (Water)
7.3. Red chemlite(s) attached to front of jumper
7.4. Green chemlite(s) attached to rear of jumper
7.5. Equipment load illuminated as required
7.6. Altimeter – Chemlite

8. Individual Equipment (Land)
8.1. Helmet
8.2. Goggles/Visor
8.3. Gloves
8.4. Altimeter
8.5. Jump/Tree Suit

9. Individual Equipment (Water)
9.1. Wetsuit/Drysuit
9.1.1. Jacket
9.1.2. Trousers
9.1.3. Hood
9.1.4. Gloves
9.1.5. Booties
9.1.6. Fix-E-Palms
9.2. Face mask, fins, and whistle
9.3. Jumpers flotation device
9.4. Divers knife/tool

10. Special Mission Equipment

10.1. Weapons/Ammunition/Pyrotechnics
10.2. Combat/Field/Mountain Equipment
10.3. NVGs

11. Special Mission Water Equipment

11.1. Protective head gear
11.2. Snorkel
11.3. SPUDS – Gauged and checked
  11.3.1. Regulator – Attached
  11.3.2. Air valve – ON (Check regulator)
11.4. ML-4 Kit
11.5. Fanny Pack
11.6. Divers watch
11.7. Depth gauge
11.8. Underwater compass
11.9. Underwater flashlight
11.10. Shark dart
11.11. Weight belt with dive weights
11.12. Carabiner(s)
11.13. Scissors

12. HAHO Special Mission Equipment (Team)

12.1. Medical Kit – Minimum one
12.2. Radio with guard capability – One minimum **NOTE:** Separate radios are required to communicate with the aircraft and the jumpers if frequencies are not compatible

13. HAHO Special Mission Equipment (Individual)

13.1. Helmet with communications
13.2. Radio
13.3. Silva compass on chest mount
13.4. Emergency signaling device on person
13.5. Warm clothing
13.6. GPS
13.7. Toggle extensions

14. HAHO Special Mission Equipment (Navigator)

14.1. HAHO compass board
14.2. Maps and map board
14.3. NVGs
14.4. Electronic Nav/Aid
14.5. Route calculator

15. HAHO Special Mission Equipment (Team Leader)

15.1. Map and map board.
15.2. NVGs

16. Next Checklists – Jumpmaster Parachute Insertion Team Brief (Page 37)

TEAM MEMBER EQUIPMENT CHECKLIST
(AMF)
(Brief/inspect applicable items only)

1. AMF Assembly
- 1.1. Serviceable
- 1.2. Inspection/repack dates – Current
- 1.3. Hand deploy pilot chute
  - 1.3.1. Secure in pocket – Handle exposed
  - 1.3.2. Bridle – Properly routed
- 1.4. Reserve ripcord
  - 1.4.1. Handle in pocket and secure
  - 1.4.2. Cable routing and travel checked
  - 1.4.3. Pin(s) checked
- 1.5. Three ring riser assembly
  - 1.5.1. Connections
  - 1.5.2. Routing
  - 1.5.3. Rings – Rotate
  - 1.5.4. Nylon coated cable – Inspect for damage from end of cable to fabric locking loop
  - 1.5.5. Fabric locking loops – Inspect for damage and twists
  - 1.5.6. Reserve static line – Attached

2. AOD – Functioning and calibrated

3. Night Lighting
- 3.1. Strobe light on back of helmet pointing upward
- 3.2. Red chemlite(s) attached to front of jumper
- 3.3. Green chemlite(s) attached to rear of jumper
- 3.4. Altimeter – Chemlite

4. Individual Equipment
- 4.1. Protective head gear
- 4.2. Protective eye wear
- 4.3. Visual Altimeter
- 4.4. Audible Altimeter
- 4.5. Jumpsuit
- 4.6. Camera(s)
- 4.7. Radios

5. Next Checklists – Jumpmaster Parachute Insertion Team Brief (Page 37)

TANDEM PASSENGER BRIEFING GUIDE
(Brief/Perform applicable items only)

1. Orientation
- 1.1. Tandem pilot background
- 1.2. Passenger jump background
- 1.3. Tandem Concept
  - 1.3.1. One parachute system, one pilot, one passenger
  - 1.3.2. Pilot in command
  - 1.3.3. Pilot responsible for all operations, normal and emergency
  - 1.3.4. Passenger assistance during
    - 1.3.4.1. Hook up
    - 1.3.4.2. Safety check
    - 1.3.4.3. Exit
    - 1.3.4.4. Freefall position, when signaled
    - 1.3.4.5. Canopy control
    - 1.3.4.6. Landing position/flare
    - 1.3.4.7. Following commands of pilot
- 1.4. Brief Tandem History
- 1.5. Show videotape (if available)

2. Equipment Familiarization
- 2.1. Fit passenger with jumpsuit, helmet, goggles
- 2.2. Show and explain and fit passenger harness
- 2.3. Show and explain parachute system
- 2.4. Hook up
- 2.5. Doff all harnesses

3. Pre-Jump Walk Through
- 3.1. Aircraft hazards
  - 3.1.1. Stay with pilot
  - 3.1.2. Propellers/Rotorblades (Main and Tail)
  - 3.1.3. Noise
- 3.2. Aircraft emergencies
  - 3.2.1. Follow pilot's commands
  - 3.2.2. Emergency exits
- 3.3. Jump Walk Through
  - 3.3.1. Explain timing of hook up on jump run
  - 3.3.2. Jump run, spotting, door
  - 3.3.3. Explain and walk through exit
  - 3.3.4. Explain and demonstrate exit arch
  - 3.3.5. Explain drogue and drogue OK signal
  - 3.3.6. Emphasize arch and looking out
  - 3.3.7. Mention breathing
  - 3.3.8. Explain speed, time, and altitudes

3.3.9. Explain turns, arms out and arms in
3.3.10. Explain opening signal and procedure

4. Under Canopy Procedures
4.1. Explain release or loosening of side straps
4.2. Explain toggle configuration and assisted steering

5. Geared Up Practice (Accomplished just prior to boarding aircraft)
5.1. Don equipment, hook up and practice jump until passenger is familiar with jump procedures
5.2. Unhook after initials practices are completed
5.3. Relax and load aircraft as required

6. Next Checklist – Tandem Pilot Equipment Checklist (Page 35)

TANDEM PILOT EQUIPMENT CHECKLIST
(Brief/inspect applicable items only)

1. Tandem Parachute Assembly
- 1.1. Serviceable
- 1.2. Inspection/repack dates – Current
- 1.3. Deployment Handles
  - 1.3.1. Cutaway Handle – Secure
  - 1.3.2. RSL – Attached, secure, properly routed
  - 1.3.3. Reserve Handle – Secure
  - 1.3.4. Primary Drogue Release – Completed seated and secure
  - 1.3.5. Drogue – Slides out/in pocket easily
  - 1.3.6. Drogue Handle – Exposed
  - 1.3.7. Secondary Drogue Release – Completely seated, cable housing not looped, handle secure
- 1.4. Three ring riser assembly
  - 1.4.1. Connections
  - 1.4.2. Routing
  - 1.4.3. Rings – Rotate
  - 1.4.4. Nylon coated cable – Inspect for damage from end of cable to fabric locking loop
  - 1.4.5. Fabric locking loops – Inspect for damage and twists
  - 1.4.6. Reserve static line – Attached
- 1.5. AOD – Functioning and calibrated
- 1.6. Drogue three ring release assembly
  - 1.6.1. Each release cable is through only one side of the free floating three-ring release fabric loop
  - 1.6.2. Cables are completed seated
  - 1.6.3. Assembly is properly stowed in pouch
- 1.7. Passenger Harness – Serviceable
  - 1.7.1. Shoulder snaps and safety pins – Serviceable
  - 1.7.2. Waist connector quick ejectors – Serviceable

2. Passenger Equipment
- 2.1. Protective head gear
- 2.2. Goggles
- 2.3. Jumpsuit
- 2.4. Gloves

3. Pilot Equipment
- 3.1. Protective head gear
- 3.2. Protective eye wear
- 3.3. Jumpsuit (Large suit recommended)
- 3.4. Visual Altimeter
- 3.5. Audible Altimeter

4. Next Checklist – Jumpmaster Parachute Insertion Team Brief (Page 37)

JUMPMASTER PARACHUTE INSERTION TEAM BRIEF
(Brief applicable items only)

1. Roll Call

2. Time Hack

3. Classification

4. Jump description
- 4.1. Type of jump
- 4.2. Altitude
- 4.3. Oxygen requirements
- 4.4. Aircraft
  - 4.4.1. Type/Characteristics
  - 4.4.2. Tail number(s)
  - 4.4.3. Load location and time
  - 4.4.4. Station time
  - 4.4.5. Take-off time
- 4.5. Flight
  - 4.5.1. Duration
  - 4.5.2. Route
  - 4.5.3. TOT

5. Parachutist Currency and Qualifications
- 5.1. Parachutist training and currency requirements – Checked
- 5.2. Equipment/Aircraft restrictions
- 5.3. Crew rest and duty limitations

6. DZ Information (Brief from DZ Survey if available)
- 6.1. Primary DZ (Show on map)
  - 6.1.1. Name
  - 6.1.2. Markings and features
  - 6.1.3. Recognition symbol
- 6.2. Emergency LZ(s) – Brief applicable items from 6.1.

7. Weather
- 7.1. Forecast
- 7.2. Illumination
- 7.3. Temperatures (Altitude/Surface)
- 7.4. Winds (Altitude/Surface)
- 7.5. Sea state
- 7.6. Cloud cover
- 7.7. Precipitation
- 7.8. Visibility
- 7.9. Altimeter and AOD settings

8. Communications
- 8.1. Radio(s): Type, quantity, and frequencies
- 8.2. Secure/unsecure
- 8.3. Team call sign(s)/number(s)
- 8.4. Radio check
- 8.5. Radio discipline
- 8.6. Waterproofing

9. Individual Responsibilities
- 9.1. Assistant JM
- 9.2. Oxygen NCO (See AFI 11-409)
- 9.3. Team leader/assistant
- 9.4. Navigator/alternate (HAHO)
- 9.5. Medic (Primary/alternate)

10. Deployment Information
- 10.1. Order of deployment
- 10.2. Type of exit, interval's, and delay's
- 10.3. Exit point and route (Show on map)
- 10.5. Free fall maneuvers/grouping
- 10.6. Opening altitudes
  - 10.6.1. Break
    - 10.6.1.1. **NOTE:** No less than 1000' above pull altitude begin separation maneuvers to achieve 50-meter pre-opening lateral separation
    - 10.6.1.2. **NOTE:** Pre-brief all RW jumpers with the tandem pair that at no less than 1500' above pull altitude to begin separation maneuvers to achieve 200 meter pre-opening lateral separation from the tandem pair
  - 10.6.2. Wave-off
  - 10.6.3. Pull
- 10.7. Cloud entry procedures
  - 10.7.1. Entry/exit and regrouping
  - 10.7.2. Free fall maneuvers
  - 10.7.3. Pulling in clouds
  - 10.7.4. Canopy flying
- 10.8. HAHO Formation
  - 10.8.1. Type, jumpers positions
  - 10.8.2. Color of NAV jumpsuit/chemlite
  - 10.8.3. Compass heading to DZ
  - 10.8.4. Distance to DZ (Enroute points, altitudes)
  - 10.8.5. Terrain features/checkpoints on route
- 10.9. Landing Pattern
- 10.10. Actions at DZ

11. Aircraft Procedure and Jump Commands

11.1. HALO/HAHO
- 11.1.1. Don helmets
- 11.1.2. Fasten/Unfasten seat belts
- 11.1.3. Mask
- 11.1.4. Check oxygen
- 11.1.5. Time warnings
- 11.1.6. Wind speed/Gusting winds
- 11.1.7. Arm ARR
- 11.1.8. Stand up
- 11.1.9. Move to the rear
- 11.1.10. Stand by
- 11.1.11. Go
- 11.1.12. Emergency bailout
- 11.1.13. No drop
- 11.1.14. Disarm ARR

11.2. Static Line
- 11.2.1. Don helmets
- 11.2.2. Fasten/Unfasten seat belts
- 11.2.3. Time warnings
- 11.2.4. Wind speed/Gusting winds
- 11.2.5. No drop
- 11.2.6. Get ready
- 11.2.7. Stand up
- 11.2.8. Hook up
- 11.2.9. Check static lines
- 11.2.10. Check equipment
- 11.2.11. Sound off for equipment check
- 11.2.12. Stand by
- 11.2.13. Go

12. Special Considerations

12.1. Unconscious jumper/major separation

12.2. Missing jumper on landing

13. Next Checklist – Parachutist Emergency Procedures

13.1. Round – Page 41

13.2. Static Line Square – Page 46

13.3. Free Fall Square – Page 54

13.4. AMF– Page 60

13.5. Tandem – Page 66

PARACHUTIST EMERGENCY PROCEDURES BRIEF
(ROUND)
(Brief applicable items only)

1. Emergency Parachutist Bail Out Procedures (After Jumpers Stand Up and Hook Up)
- 1.1. Under acceptable conditions, pilot maintains altitude and attitude to evacuate the jumpers
- 1.2. Evacuation is ordered by green light and briefed alarm bells/signals
- 1.3. Minimum acceptable altitude is 400' AGL for Fixed-wing, 1000' AGL for Rotary-wing
- 1.4. Emergency occurs during unacceptable conditions
  - 1.4.1. No-drop signal given
  - 1.4.2. Red lights turned "ON"
  - 1.4.3. Jumpers unhook static lines
  - 1.4.4. Take seats and fasten safety belts
  - 1.4.5. Prepare for crash landing or ditching

2. Inadvertent Reserve Pilot Chute Deployment
- 2.1. Contain pilot chute in the aircraft
- 2.2. Yell "PILOT CHUTE"
- 2.3. Move away from exits
- 2.4. De-rig and secure jumper and equipment
- 2.5. Exit immediately if any part of the parachute system is pulled outside of aircraft
- 2.6. If jumper makes an unplanned exit
  - 2.6.1. Follow him down
  - 2.6.2. Monitor his condition
  - 2.6.3. Relay his position to DZ controller
  - 2.6.4. Deploy additional jumper(s) as briefed

3. Towed Parachutist – Fixed Wing
- 3.1. Stop the stick (JM)
- 3.2. Red lights turned "ON"
- 3.3. Towed parachutist indicates conscious/usable reserve. (Indicated by tight body position with both hands on reserve)
- 3.4. HC-130 – If towed from paratroop door, expect the aircraft to avoid turning in direction of parachutist
- 3.5. C-130 (Generic) – If towed from paratroop door, expect the aircraft to
  - 3.5.1. Lower landing gear
  - 3.5.2. Set flaps to 100 percent
  - 3.5.3. Avoid turning in direction of parachutist
- 3.6. Tow priorities
  - 3.6.1. Door: First – Retrieve
    Second – Cut Free
  - 3.6.2. Ramp: First – Cut Free
    Second – Retrieve

WARNING: Retrieve the parachutist if unconscious, has an unusable reserve, does not signal, cannot be observed, or cannot be cut free

3.7. If jumper is cut free, attempt to release over center of DZ

WARNING: Jumper will not deploy reserve parachute until free of the aircraft

4. Towed Parachutist – Rotary Wing

4.1. Jumpmaster/Safetyman stops the stick and recovers all static lines/deployment bags

4.2. Towed parachutist indicates conscious/usable reserve. (Indicated by tight body position with both hands on reserve)

4.3. Aircraft descends slowly to DZ/suitable landing site

4.4. Aircraft establishes a hover and lowers jumper to the ground

WARNING: Unconscious jumper will not be lowered into water

4.5. If jumper is cut free, attempt to release over center of DZ

WARNING: Do NOT deploy reserve parachute until free of the aircraft

5. Emergency Use of Reserve Parachute

5.1. Total malfunction (Pull-Drop Method)

5.1.1. Enter good, tight body position

5.1.2. Keep feet and knees together

5.1.3. Grasp reserve carrying handle with left hand

5.1.4. Turn head left or right

5.1.5. Pull ripcord handle with right hand and drop it to the ground. **NOTE:** For center pull reserve, pull ripcord with both hands

5.2. Partial Malfunction (Down-and-Away Method)

5.2.1. Enter good, tight body position

5.2.2. Keep feet and knees together

5.2.3. Place left hand over front of reserve

5.2.4. Pull ripcord handle with right hand, prevent pilot chute from escaping with left hand. **NOTE:** Strong pressure must be maintained with the left hand to prevent the pilot chute and reserve canopy from springing out

5.2.5. Reach into reserve pack with right hand between canopy and pack

5.2.6. Grasp canopy and pilot chute with both hands, lift out of pack, and raise over either shoulder

5.2.7. Throw down and out vigorously, if spinning throw in direction of spin

6. Parachute Collision Avoidance

6.1. Lower jumper has "Right-of-Way"

6.2. Maintain 50-foot lateral and vertical separation (25-feet for T-10C)

6.3. If jumper lands on another jumper's canopy run off immediately

6.4. If collision cannot be avoided, spread eagle and attempt to bounce off the other jumper's suspension lines

6.5. If a parachutist enters another parachutists suspension line – Protect ripcord with right hand, attempt to avoid becoming entangled

6.6. MC1-1B/C Entanglement - Immediately upon entanglement, both jumpers will activate their reserves

using the down and away method

6.7. T-10C – Move hand-under-hand to eye level and perform a good PLF. **NOTE:** If both parachutes lose lift - Both jumpers will activate their reserves using the down and away method

7. Emergency Landings (Brief only if obstacles are present)

7.1. Trees

7.1.1. Do not lower equipment, if lowered, jettison

7.1.2. Maintain canopy control until contact with the trees

7.1.3. Rotate forearms to front of face and chest

7.1.4. Prepare to execute a PLF if breaking through the trees

7.1.5. If hung up – Consider activating the reserve and climbing down

7.2. Wires

7.2.1. Avoid at all cost

7.2.2. Lower and jettison equipment

7.2.3. Arms extended, place palms on the inside of front risers, feet and knees together, before contact

7.2.4. Push forward on the front risers, bending at the waist, initiating a rocking motion in an attempt to work through the wires

7.2.5. If passing through – Prepare for PLF

7.2.6. If hung up – Remain motionless until power is disconnected

7.2.7. If on the ground – Activate canopy releases and move away

7.3. Water (Unplanned)

7.3.1. Jettison headgear, lower equipment

7.3.2. Unsnap left side of reserve and release waistband

7.3.3. Release chest strap, locate quick ejectors on leg straps

7.3.4. Upon contact with water, release leg straps, throw arms up and arch out of the harness

7.3.5. Prepare for PLF if the water is shallow

8. Next Checklist – Jumpmaster Aircraft Inspection Checklist (Page 75)

PARACHUTIST EMERGENCY PROCEDURES BRIEF
(STATIC LINE SQUARE)
(Brief applicable items only)

1. Emergency Parachutist Bail Out Procedures (After Jumpers Stand Up and Hook Up)
- 1.1. Under acceptable conditions, pilot maintains altitude and attitude to evacuate the jumpers
- 1.2. Evacuation is ordered by green light/briefed alarm bells/signals
- 1.3. Minimum acceptable altitude is 1000' for Fixed and Rotary-wing
- 1.4. Emergency occurs during unacceptable conditions
  - 1.4.1. No-drop signal given
  - 1.4.2. Red lights turned "ON"
  - 1.4.3. Jumpers unhook static lines
  - 1.4.4. Take seats and fasten safety belts
  - 1.4.5. Prepare for crash landing or ditching

2. Inadvertent Pilot Chute Deployment
- 2.1. Contain pilot chute in the aircraft
- 2.2. Yell "PILOT CHUTE"
- 2.3. Move away from exits
- 2.4. De-rig and secure jumper and equipment
- 2.5. Exit immediately if any part of the parachute system is pulled outside of aircraft
- 2.6. If jumper makes an unplanned exit
  - 2.6.1. Follow him down
  - 2.6.2. Monitor his condition
  - 2.6.3. Relay his position to DZ controller
  - 2.6.4. Deploy additional jumper(s) as briefed

3. Towed Parachutist – Fixed Wing
- 3.1. Stop the stick (JM)
- 3.2. Red lights turned "ON"
- 3.3. Towed parachutist indicates conscious/usable reserve. (Indicated by tight body position with one hand protecting cutaway handle and one hand protecting reserve ripcord)

WARNING: Do NOT cutaway and deploy reserve parachute until clear of the aircraft

- 3.4. HC-130 – If towed from paratroop door, expect the aircraft to avoid turning in direction of parachutist
- 3.5. C-130 (Generic) – If towed from paratroop door, expect the aircraft to
  - 3.5.1. Lower landing gear
  - 3.5.2. Set flaps to 100 percent
  - 3.5.3. Avoid turning in direction of parachutist
- 3.6. Tow priorities
  - 3.6.1. Door: First – Retrieve
Second – Cut Free
  - 3.6.2. Ramp: First – Cut Free
Second – Retrieve

WARNING: Retrieve parachutist if he is unconscious, has an unusable reserve, does not signal, cannot be observed, or cannot be cut free

3.7. If jumper is cut free, attempt to release over center of DZ

4. Towed Parachutist – Rotary Wing

4.1. Jumpmaster/Safetyman stops the stick and recovers all static lines/deployment bags

4.2. Towed parachutist indicates conscious/usable reserve. (Indicated by tight body position with one hand protecting cutaway handle and one hand protecting reserve ripcord)

WARNING: Do NOT deploy reserve parachute until free of the aircraft

4.3. Aircraft descends slowly to DZ/suitable landing site

4.4. Aircraft establishes a hover and lowers jumper to the ground

WARNING: Unconscious jumper will not be lowered into water

4.5. Jumpmaster/Safetyman unhooks jumper's static line, deplanes, and detaches towed parachutist

4.6. If jumper is cut free, attempt to release over center of DZ

5. Cutaway Procedure

5.1. Look at and grab the cutaway handle

5.2. Look at and grab the reserve ripcord

5.3. Arch

5.4. Pull cutaway handle

5.5. Pull reserve ripcord

5.6. Check to ensure the reserve pilot chute has deployed

5.7. Perform the post opening procedures

6. Post Opening Procedures

6.1. Steer to avoid. Use rear risers to avoid other jumpers. Turn to the right to avoid head on collisions

6.2. Release brakes

6.3. Check canopy

6.4. Resolve post-opening malfunctions

6.5. If controllability is questionable, perform a controllability check

6.6. If a malfunction cannot be resolved and canopy is uncontrollable, cutaway no lower than 2,000 feet AGL. **NOTE:** For RAMZ and HAHO operations, cutaways should be initiated immediately if any main canopy performance is questionable

6.7. Orient yourself to the DZ

6.8. Locate other jumpers and achieve separation

6.9. Activate strobe light

6.10. Maintain altitude awareness

7. Controllability Check. NOTE: Controllability check is accomplished only when canopy controllability is questionable

7.1. Maintain altitude awareness
7.2. Release brakes (if not already accomplished)
7.3. Look left, turn left 90 degrees
7.4. Look right, turn right 90 degrees
7.5. Determine stall point. **NOTE:** If canopy requires more than 50% opposite toggle to counter turn, canopy is uncontrollable. If canopy stalls prior to 50% brakes, it is uncontrollable
7.6. If the canopy is uncontrollable – Perform cutaway procedures

8. Opening and Post-Opening Malfunctions
8.1. Pilot chute over the nose
8.2. Broken lines/Rips/tears/tension knots
8.3. Broken control lines
8.4. Dual Main and Reserve Deployment
8.4.1. If both parachutes deploy completely – Cutaway main
8.4.2. If only the reserve pilot chute and bridle deploy – Attempt to contain them
8.4.3. If the reserve parachute partially deploys – Slow the main parachute, and be prepared to cut away should the reserve parachute fully inflate
8.5. Horseshoe, bag lock, streamer, and riser separation
8.6. Snivel
8.7. Hung slider/closed end cells
8.8. Premature brake release
8.9. Line twists
8.10. Floating ripcord
8.11. Hard pull
8.12. Pack closure
8.13. Pilot chute hesitation
8.14. Altimeter failure or loss
8.15. Collision on exit

9. Parachute Collision Avoidance
9.1. Lower jumper has "Right-of-Way"
9.2. Maintain safe separation distance (25 meters to the rear and above). **NOTE:** Except CRW for STARS
9.3. Look before turning
9.4. If unable to avoid collision – Spread arms and legs in an attempt to bounce off canopy/lines

10. Canopy Entanglements
10.1. Communication between jumpers and altitude awareness is the key to successful disengagement
10.2. Above 2000' AGL – Top jumper has a GOOD canopy
10.2.1. Top jumper attempts to clear himself of the canopy
10.2.2. If the canopy clears it should reopen in 150-200'
10.2.3. If canopy cannot be cleared – Check altitude
10.2.4. Above 2000' – Lower jumper perform cutaway
10.3. Between 1000 – 2000' AGL – Top jumper has a GOOD Canopy
10.3.1. Lower jumper has two options
10.3.1.1. Perform cutaway if above 1000' AGL

10.3.1.2. Stay with top jumper and perform procedures for "Below 1000' AGL"

10.4. Below 1000' AGL – Top jumper has a GOOD canopy

10.4.1. Top jumper – Maintain control of lower jumpers canopy

10.4.2. Lower jumper – Jettison equipment

10.4.3. Top jumper – Flies a straight and level final approach and lands with 50% brakes. **NOTE:** Stall point is higher with added suspended weight

10.4.4. Both jumpers – Perform a PLF

WARNING: Turns can cause a severe pendulum effect and should be avoided at low altitude. DO NOT attempt a flared landing

10.5. Both jumpers entangle and neither has a good canopy at any altitude

10.5.1. Top jumper clears himself of entangled lines and performs cutaway (Altitude permitting)

10.5.2. Lower jumper performs cutaway after top jumper clears the entanglement (Altitude permitting)

WARNING: TOP JUMPER may be FATALLY engulfed in the canopy of the low jumper if the low jumper performs a cut away prior to the top jumper

10.5.3. Last resort – Both jumpers deploy reserves in an attempt to slow descent

10.5.3.1. If only one deploys – Jumper with the good canopy brings the other entangled jumper to the ground

10.5.3.2. If both reserves deploy – Both jumpers cutaway from entanglement

11. Emergency Landings

11.1. Trees

11.1.1. Do not lower equipment, jettison if already lowered

11.1.2. Turn canopy into wind

11.1.3. Brake to achieve vertical descent

11.1.4. Prepare for PLF

11.1.5. Use forearms to protect face and neck

11.2. Wires

11.2.1. Throw away ripcord

11.2.2. Turn off oxygen

11.2.3. Avoid contact at all cost, even if downwind

11.2.4. Streamline body

11.2.5. If hung up – Remain motionless until power is disconnected

11.2.6. Prepare for PLF after passing through wires

11.2.7. If the chute is hung up and jumper contacts ground – Pull cutaway handle

11.2.8. **NOTE:** If time and altitude permit – Unhook RSL and jettison equipment

11.3. Water (Unintentional)

11.3.1. Jettison O2 mask and equipment

11.3.2. Disconnect reserve static line

11.3.3. Sit well back in the harness

11.3.4. Release chest strap and waist strap

11.3.5. Inflate flotation device

11.3.6. Turn canopy in wind and slow forward speed
11.3.7. Release the right toggle so the right hand is free to cutaway parachute (if being dragged)
11.3.8. If dragged – Jettison canopy
11.3.9. Release leg straps and swim free of harness/chute

12. Next Checklist – Jumpmaster Aircraft Inspection Checklist (Page 75)

PARACHUTIST EMERGENCY PROCEDURES BRIEF
(FREE FALL SQUARE)
(Brief applicable items only)

1. Emergency Parachutist Bail Out Procedures
- 1.1. Below 1000 ft AGL
  - 1.1.1. Take aircraft seats and fasten seat belts
  - 1.1.2. Prepare for crash landing or ditching
- 1.2. 1000 – 2000 ft AGL
  - 1.2.1. Exit at jumpmaster's command
  - 1.2.2. Deploy reserve parachute when clear of aircraft
  - 1.2.3. Attempt to land with other jumpers
- 1.3. Above 2000 ft AGL
  - 1.3.1. Exit at jumpmaster's command
  - 1.3.2. Deploy main parachute after maximum 5-second delay
  - 1.3.3. Attempt to land with other jumpers

2. Inadvertent Pilot Chute Deployment
- 2.1. Contain pilot chute in the aircraft
- 2.2. Yell "PILOT CHUTE"
- 2.3. Move away from exits
- 2.4. De-rig and secure jumper and equipment
- 2.5. Exit immediately if any part of the parachute system is pulled outside of aircraft
- 2.6. If jumper makes an unplanned exit
  - 2.6.1. Follow him down
  - 2.6.2. Monitor his condition
  - 2.6.3. Relay his position to DZ controller
  - 2.6.4. Deploy additional jumper(s) as briefed

3. Cutaway Procedures
- 3.1. Throw away the main ripcord
- 3.2. Look at and grab the cutaway handle
- 3.3. Look at and grab the reserve ripcord
- 3.4. Arch
- 3.5. Pull cutaway handle
- 3.6. Pull reserve ripcord
- 3.7. Check to ensure the reserve pilot chute has deployed
- 3.8. Perform the post opening procedures

4. Post Opening Procedures
- 4.1. Steer to avoid. Use rear risers to avoid other jumpers. Turn to the right to avoid head on collisions
- 4.2. Release brakes
- 4.3. Check canopy
- 4.4. Resolve post-opening malfunctions
- 4.5. If controllability is questionable, perform a controllability check

4.6. If a malfunction cannot be resolved and canopy is uncontrollable, cutaway no lower than 2,000 feet AGL. **NOTE:** For RAMZ and HAHO operations, cutaways should be initiated immediately if any main canopy performance is questionable
4.7. Orient yourself to the DZ
4.8. Locate other jumpers and achieve separation
4.9. Activate strobe light
4.10. Maintain altitude awareness

5. Controllability Check. NOTE: Controllability check is accomplished only when canopy controllability is questionable
5.1. Maintain altitude awareness
5.2. Release brakes (if not already accomplished)
5.3. Look left, turn left 90 degrees
5.4. Look right, turn right 90 degrees
5.5. Determine stall point. **NOTE:** If canopy requires more than 50% opposite toggle to counter turn, canopy is uncontrollable. If canopy stalls prior to 50% brakes, it is uncontrollable
5.6. If the canopy is uncontrollable – Perform cutaway procedures

6. Opening and Post-Opening Malfunctions
6.1. Pilot chute over the nose
6.2. Broken lines/Rips/tears/tension knots
6.3. Broken control lines
6.4. Dual Main and Reserve Deployment
6.4.1. If both parachutes deploy completely – Cutaway main
6.4.2. If only the reserve pilot chute and bridle deploy – Attempt to contain them
6.4.3. If the reserve parachute partially deploys – Slow the main parachute, and be prepared to cut away should the reserve parachute fully inflate
6.5. Horseshoe, bag lock, streamer, and riser separation
6.6. Snivel
6.7. Hung slider/closed end cells
6.8. Premature brake release
6.9. Line twists
6.10. Floating ripcord
6.11. Hard pull
6.12. Pack closure
6.13. Pilot chute hesitation
6.14. Altimeter failure or loss
6.15. Collision on exit

7. Parachute Collision Avoidance
7.1. Lower jumper has "Right-of-Way"
7.2. Maintain safe vertical and horizontal separation (25 meters to the rear and above). **NOTE:** Except CRW for STARS
7.3. Look before turning
7.4. If unable to avoid collision – Spread arms and legs in an attempt to bounce off canopy/lines

8. Canopy Entanglements

8.1. Communication between jumpers and altitude awareness is the key to successful disengagement

8.2. Above 2000' AGL – Top jumper has a GOOD canopy

8.2.1. Top jumper attempts to clear himself of the canopy

8.2.2. If the canopy clears it should reopen in 150-200'

8.2.3. If canopy cannot be cleared – Check altitude

8.2.4. Above 2000' – Lower jumper perform cutaway

8.3. Between 1000 – 2000' AGL – Top jumper has a GOOD Canopy

8.3.1. Lower jumper has two options

8.3.1.1. Perform cutaway if above 1000' AGL

8.3.1.2. Stay with top jumper and perform procedures for "Below 1000' AGL"

8.4. Below 1000' AGL – Top jumper has a GOOD canopy

8.4.1. Top jumper – Maintain control of lower jumpers canopy

8.4.2. Lower jumper – Jettison equipment

8.4.3. Top jumper – Flies a straight and level final approach and lands with 50% brakes. **NOTE:** Stall point is higher with added suspended weight

8.4.4. Both jumpers – Perform a PLF

WARNING: Turns can cause a severe pendulum effect and should be avoided at low altitude. DO NOT attempt a flared landing

8.5. Both jumpers entangle and neither has a good canopy at any altitude

8.5.1. Top jumper clears himself of entangled lines and performs cutaway (Altitude permitting)

8.5.2. Lower jumper performs cutaway after top jumper clears the entanglement (Altitude permitting)

WARNING: TOP JUMPER may be FATALLY engulfed in the canopy of the low jumper if the low jumper performs a cut away prior to the top jumper

8.5.3. Last resort – Both jumpers deploy reserves in an attempt to slow descent

8.5.3.1. If only one deploys – Jumper with the good canopy brings the other entangled jumper to the ground

8.5.3.2. If both reserves deploy – Both jumpers cutaway from entanglement

9. Emergency Landings

9.1. Trees

9.1.1. Do not lower equipment, jettison if already lowered

9.1.2. Turn canopy into wind

9.1.3. Brake to achieve vertical descent

9.1.4. Prepare for PLF

9.1.5. Use forearms to protect face and neck

9.2. Wires

9.2.1. Throw away ripcord

9.2.2. Turn off oxygen

9.2.3. Avoid contact at all cost, even if downwind

9.2.4. Streamline body

9.2.5. If hung up – Remain motionless until power is disconnected

9.2.6. Prepare for PLF after passing through wires
9.2.7. If the chute is hung up and jumper contacts ground – Pull cutaway handle
9.2.8. **NOTE:** If time and altitude permit – Unhook RSL and jettison equipment

9.3. Water (Unintentional)
9.3.1. Jettison O2 mask and equipment
9.3.2. Disconnect reserve static line
9.3.3. Sit well back in the harness
9.3.4. Release chest strap and waist strap
9.3.5. Inflate flotation device
9.3.6. Turn canopy in wind and slow forward speed
9.3.7. Release the right toggle so the right hand is free to cutaway parachute (if being dragged)
9.3.8. If dragged – Jettison canopy
9.3.9. Release leg straps and swim free of harness/chute

10. Next Checklist – Jumpmaster Aircraft Inspection Checklist (Page 75)

PARACHUTIST EMERGENCY PROCEDURES BRIEF
(AMF)
(Brief applicable items only)

1. Emergency Parachutist Bail Out Procedures
- 1.1. Below 1000 ft AGL
  - 1.1.1. Take aircraft seats and fasten seat belts
  - 1.1.2. Prepare for crash landing or ditching
- 1.2. 1000 – 2000 ft AGL
  - 1.2.1. Exit at jumpmaster's command
  - 1.2.2. Deploy reserve parachute when clear of aircraft
  - 1.2.3. Attempt to land with other jumpers
- 1.3. Above 2000 ft AGL
  - 1.3.1. Exit at jumpmaster's command
  - 1.3.2. Deploy main parachute after maximum 5-second delay
  - 1.3.3. Attempt to land with other jumpers

2. Inadvertent Pilot Chute Deployment
- 2.1. Contain pilot chute in the aircraft
- 2.2. Yell "PILOT CHUTE"
- 2.3. Move away from exits
- 2.4. De-rig and secure jumper and equipment
- 2.5. Exit immediately if any part of the parachute system is pulled outside of aircraft
- 2.6. If jumper makes an unplanned exit
  - 2.6.1. Follow him down
  - 2.6.2. Monitor his condition
  - 2.6.3. Relay his position to DZ controller
  - 2.6.4. Deploy additional jumper(s) as briefed

3. Cutaway Procedures
- 3.1. Look at and grab the cutaway handle
- 3.2. Look at and grab the reserve ripcord
- 3.3. Arch
- 3.4. Pull cutaway handle
- 3.5. Pull reserve ripcord
- 3.6. Check to ensure the reserve pilot chute has deployed
- 3.7. Perform the post opening procedures

4. Post Opening Procedures
- 4.1. Steer to avoid. Use rear risers to avoid other jumpers. Turn to the right to avoid head on collisions
- 4.2. Release brakes
- 4.3. Check canopy
- 4.4. Resolve post-opening malfunctions
- 4.5. If controllability is questionable – Perform a controllability check
- 4.6. If a malfunction cannot be resolved and canopy is uncontrollable – Cutaway no lower than 2,000 feet

AGL.
4.7. Orient yourself to the DZ
4.8. Locate other jumpers and achieve separation
4.9. Activate strobe light
4.10. Maintain altitude awareness

5. Controllability Check. NOTE: Controllability check is accomplished only when canopy controllability is questionable
5.1. Maintain altitude awareness
5.2. Release brakes (if not already accomplished)
5.3. Look left, turn left 90 degrees
5.4. Look right, turn right 90 degrees
5.5. Determine stall point. **NOTE:** If canopy requires more than 50% opposite toggle to counter turn, canopy is uncontrollable. If canopy stalls prior to 50% brakes, it is uncontrollable
5.6. If the canopy is uncontrollable – Perform cutaway procedures

6. Opening and Post-Opening Malfunctions
6.1. Pilot chute-in tow
6.1.1. Vigorous over the shoulder check
6.1.2. If pilot chute does not deploy, pull reserve
6.2. Broken lines/Rips/tears/tension knots
6.3. Broken control lines
6.4. Dual Main and Reserve Deployment
6.4.1. If both parachutes deploy completely – Cutaway main
6.4.2. If only the reserve pilot chute and bridle deploy – Attempt to contain them
6.4.3. If the reserve parachute partially deploys – Slow the main parachute, and be prepared to cut away should the reserve parachute fully inflate
6.5. Horseshoe, bag lock, streamer, and riser separation.
6.6. Snivel
6.7. Hung slider/closed end cells
6.8. Premature brake release
6.9. Line twists
6.10. Lost Hand Deploy – Pull reserve
6.11. Hard pull
6.11.1. Pull in direction of pocket once more
6.11.2. If unsuccessful – Pull reserve
6.12. Pack closure
6.13. Altimeter failure or loss
6.14. Collision on exit

7. Parachute Collision Avoidance
7.1. Lower jumper has "Right-of-Way"
7.2. Maintain safe vertical and horizontal separation (25 meters to the rear and above). **NOTE:** Except CRW for STARS
7.3. Look before turning
7.4. If unable to avoid collision – Spread arms and legs in an attempt to bounce off canopy/lines

8. Canopy Entanglements

8.1. Communication between jumpers and altitude awareness is the key to successful disengagement

8.2. Above 2000' AGL – Top jumper has a GOOD canopy

8.2.1. Top jumper attempts to clear himself of the canopy

8.2.2. If the canopy clears it should reopen in 150-200'

8.2.3. If canopy cannot be cleared – Check altitude

8.2.4. Above 2000' – Lower jumper perform cutaway

8.3. Between 1000 – 2000' AGL – Top jumper has a GOOD Canopy

8.3.1. Lower jumper has two options

8.3.1.1. Perform cutaway if above 1000' AGL

8.3.1.2. Stay with top jumper and perform procedures for "Below 1000' AGL"

8.4. Below 1000' AGL – Top jumper has a GOOD canopy

8.4.1. Top jumper – Maintain control of lower jumpers canopy

8.4.2. Lower jumper – Jettison equipment

8.4.3. Top jumper – Flies a straight and level final approach and lands with 50% brakes. **NOTE:** Stall point is higher with added suspended weight

8.4.4. Both jumpers – Perform a PLF

WARNING: Turns can cause a severe pendulum effect and should be avoided at low altitude. DO NOT attempt a flared landing

8.5. Both jumpers entangle and neither has a good canopy at any altitude

8.5.1. Top jumper clears himself of entangled lines and performs cutaway (Altitude permitting)

8.5.2. Lower jumper performs cutaway after top jumper clears the entanglement (Altitude permitting)

WARNING: TOP JUMPER may be FATALLY engulfed in the canopy of the low jumper if the low jumper performs a cut away prior to the top jumper

8.5.3. Last resort: Both jumpers deploy reserves in an attempt to slow descent

8.5.3.1. If only one deploys – Jumper with the good canopy brings the other entangled jumper to the ground

8.5.3.2. If both reserves deploy – Both jumpers cutaway from entanglement

9. Emergency Landings

9.1. Trees

9.1.1. Do not lower equipment, jettison if already lowered

9.1.2. Turn canopy into wind

9.1.3. Brake to achieve vertical descent

9.1.4. Prepare for PLF

9.1.5. Use forearms to protect face and neck

9.2. Wires

9.2.1. Throw away ripcord

9.2.2. Turn off oxygen

9.2.3. Avoid contact at all cost, even if downwind

9.2.4. Streamline body
9.2.5. If hung up – Remain motionless until power is disconnected
9.2.6. Prepare for PLF after passing through wires
9.2.7. If the chute is hung up and jumper contacts ground – Pull cutaway handle
9.2.8. **NOTE:** If time and altitude permit – Unhook RSL and jettison equipment

9.3. Water (Unintentional)
9.3.1. Jettison O2 mask and equipment
9.3.2. Disconnect reserve static line
9.3.3. Sit well back in the harness
9.3.4. Release chest strap and waist strap
9.3.5. Inflate flotation device
9.3.6. Turn canopy in wind and slow forward speed
9.3.7. If dragged – Jettison canopy
9.3.8. Release leg straps and swim free of harness/chute

10. Next Checklist – Jumpmaster Aircraft Inspection Checklist (Page 75)

PARACHUTIST EMERGENCY PROCEDURES BRIEF
(TANDEM)
(Brief applicable items only)

1. Emergency Parachutist Bail Out Procedures
- 1.1. Below 1500 ft AGL
  - 1.1.1. Take aircraft seats and fasten seat belts
  - 1.1.2. Prepare for crash landing or ditching
- 1.2. 1500 – 4000 ft AGL
  - 1.2.1. Exit at jumpmaster's command
  - 1.2.2. Deploy reserve parachute when clear of aircraft
  - 1.2.3. Attempt to land with other jumpers
- 1.3. Above 4000 ft AGL
  - 1.3.1. Exit at jumpmaster's command
  - 1.3.2. Deploy drogue when clear of aircraft and release it as soon as it inflates
  - 1.3.3. Attempt to land with other jumpers

WARNING: DO NOT release drogue before throwing it. This will cause a slow deployment of the main parachute, especially at low deployment airspeeds

2. Inadvertent Pilot Chute Deployment
- 2.1. Contain pilot chute in the aircraft
- 2.2. Yell "PILOT CHUTE"
- 2.3. Move away from exits
- 2.4. De-rig and secure jumper and equipment
- 2.5. Exit immediately if any part of the parachute system is pulled outside of aircraft
- 2.6. If jumper makes an unplanned exit
  - 2.6.1. Follow him down
  - 2.6.2. Monitor his condition
  - 2.6.3. Relay his position to DZ controller
  - 2.6.4. Deploy additional jumper(s) as briefed

3. Cutaway Procedures
- 3.1. Initiate cutaways at 2500' AGL or higher
- 3.2. Tell passenger to assume free fall position and of your intentions to cutaway
- 3.3. Scissors student legs between yours
- 3.4. Look at and grasp cutaway handle with right hand
- 3.5. Look at and grasp reserve ripcord with left hand
- 3.6. Pull cutaway handle
- 3.7. Pull reserve ripcord
- 3.8. **NOTE:** For easy pull, handles must be peeled upward and outward and then pulled down
- 3.9. Throw away cutaway handle and reserve ripcord
- 3.10. Arch and ensure reserve pilot chute has deployed
- 3.11. Perform post-opening procedures

4. Post Opening Procedures

4.1. Steer to avoid. Use rear risers to avoid other jumpers. Turn to the right to avoid head on collisions
4.2. Release brakes
4.3. Check canopy
4.4. Resolve post-opening malfunctions
4.5. If controllability is questionable – Perform a controllability check
4.6. If a malfunction cannot be resolved and canopy is uncontrollable – Cutaway no lower than 2,500 feet AGL. **NOTE:** For RAMZ and HAHO operations – Cutaways should be initiated immediately if any main canopy performance is questionable
4.7. Orient yourself to the DZ
4.8. Locate other jumpers and achieve separation
4.9. Activate strobe light
4.10. Maintain altitude awareness
4.11. Locate other jumpers and maintain separation
4.12. Hand toggles to passenger
4.13. Release passenger waist tie-down straps
4.14. Assist passenger with steering

5. Controllability Check. NOTE: Controllability check is accomplished only when canopy controllability is questionable

5.1. Maintain altitude awareness
5.2. Release brakes (if not already accomplished)
5.3. Look left, turn left 90 degrees
5.4. Look right, turn right 90 degrees
5.5. Determine stall point. **NOTE:** If canopy requires more than 50% opposite toggle to counter turn, canopy is uncontrollable. If canopy stalls prior to 50% brakes, it is uncontrollable
5.6. If the canopy is uncontrollable – Perform cutaway procedures

6. Opening and Post-Opening Malfunctions

WARNING: Time is of the essence when dealing with high-speed tandem malfunctions. The inertia generated by a tandem pair at tandem terminal exceeds the reserve's and the tandem pair's category rating for opening shock. Perform the correct emergency procedure before you reach tandem terminal

6.1. Student Interference
6.1.1. **NOTE:** PREVENTION is the key to keeping free from student interference. Keep your arms out of the passenger's reach until after the main canopy has opened
6.1.2. **NOTE:** DO NOT attempt release of captured arm with your free arm
6.1.3. Yell at passenger to release your arm(s)
6.1.4. Pull arm(s) down and back away from passenger
6.1.5. Use free arm or your forehead to incapacitate passenger
6.1.6. If right arm is free
6.1.6.1. Throw drogue
6.1.6.2. Release drogue using secondary release
6.1.7. If left arm is free – Pull reserve
6.2. Lost Drogue

6.2.1. Re-identify landmarks and attempt to locate drogue once more
6.2.2. If unsuccessful – Pull reserve
6.3. Drogue Hard Pull
6.3.1. Pull in direction of pocket once more, locking elbow against side of the container
6.3.2. If unsuccessful, pull reserve
6.4. Pulled Drogue Release before deploying Drogue
6.4.1. Deploy drogue immediately
6.4.2. This will result in a near normal main canopy opening
6.5. Drogue Hesitation/Un-inflated drogue
6.5.1. Vigorous over the shoulder check
6.5.2. If drogue is still on your back
6.5.2.1. Check VIGOROUSLY, again
6.5.2.2. If drogue does not deploy fully – Pull reserve
6.5.3. If drogue is fully deployed but not inflated
6.5.3.1. Pull drogue release(s)
6.5.3.2. Main should deploy slower than normal, if releases fail – Pull reserve
6.6. Entanglement with Drogue/Drogue Bridle
6.6.1. Un-inflated Drogue – Pull reserve
6.6.2. Inflated Drogue
6.6.2.1. Analyze and attempt to clear, quickly
6.6.2.2. Pull reserve if unable to clear
6.6.2.3. **NOTE:** DO NOT release drogue before pulling reserve during a drogue/drogue bridle entanglement
6.7. Inflated Drogue-in Tow
6.7.1. Pull other drogue release
6.7.2. If drogue does not release – Pull reserve
6.7.3. After reserve opening reach back and reel in the drogue, if main is deploying – Cutaway
6.8. Deflated Drogue-in-Tow
6.8.1. Pull other drogue release
6.8.2. If NO "trap door"/drogue release – Pull reserve
6.8.3. After reserve opening reach back and reel in the drogue, if main is deploying – Cutaway
6.9. Drogue/Canopy entanglement – Perform controllability check
6.10. Horseshoe, bag lock, streamer, and riser separation – Cutaway
6.11. Snivel – If sniveling through 2500' – Cutaway
6.12. Hung slider, closed end cells, premature brake release, broken control lines/broken lines, line twists, rips, tears, tension knots, pilot chute over the nose, and combinations – Perform controllability check
6.13. Dual Main and Reserve Deployment
6.13.1. If both parachutes deploy completely – Cutaway main
6.13.2. If only the reserve pilot chute and bridle deploy – Attempt to contain them
6.13.3. If the reserve parachute partially deploys – Slow the main parachute, and be prepared to cut away should the reserve parachute fully inflate

7. Parachute Collision Avoidance

7.1. Pre-brief all other jumpers on the same pass that the tandem pair has "Right-of-Way"
7.2. Since others jumpers may forget or not receive the brief – Always give the lower jumper the "Right-of-

Way".
7.3. Maintain safe vertical and horizontal separation (25 meters to the rear and above)
7.4. Look before turning
7.5. If unable to avoid collision – Spread arms and legs in an attempt to bounce off canopy/lines

8. Canopy Entanglements
8.1. Communication between jumpers and altitude awareness is the key to successful disengagement
8.2. Above 2500' AGL – Top jumper has a GOOD canopy
8.2.1. Top jumper attempts to clear himself of the canopy
8.2.2. If the canopy clears it should reopen in 150-200'
8.2.3. If canopy cannot be cleared – Check altitude
8.2.4. Above 2500' – Lower jumper perform cutaway
8.3. Between 1500 – 2500' AGL – Top jumper has a GOOD Canopy
8.3.1. Lower jumper has two options
8.3.1.1. Perform cutaway if above 1500' AGL
8.3.1.2. Stay with top jumper and perform procedures for "Below 1500' AGL"
8.4. Below 1500' AGL – Top jumper has a GOOD canopy
8.4.1. Top jumper – Maintain control of lower jumpers canopy
8.4.2. Lower jumper – Jettison equipment
8.4.3. Top jumper – Flies a straight and level final approach and lands with 50% brakes. **NOTE:** Stall point is higher with added suspended weight
8.4.4. Both jumpers – Perform a PLF

WARNING: Turns can cause a severe pendulum effect and should be avoided at low altitude. DO NOT attempt a flared landing

8.5. Both jumpers entangle and neither has a good canopy at any altitude
8.5.1. Top jumper clears himself of entangled lines and performs cutaway (Altitude permitting)
8.5.2. Lower jumper performs cutaway after top jumper clears the entanglement (Altitude permitting)

WARNING: TOP JUMPER may be FATALLY engulfed in the canopy of the low jumper if the low jumper performs a cut away prior to the top jumper

8.5.3. Last resort – Both jumpers deploy reserves in an attempt to slow descent
8.5.3.1. If only one deploys – Jumper with the good canopy brings the other entangled jumper to the ground
8.5.3.2. If both reserves deploy – Both jumpers cutaway from entanglement

9. Emergency Landings
9.1. Trees
9.1.1. Do NOT release or loosen waist straps
9.1.2. Turn canopy into wind
9.1.3. Brake to achieve vertical descent
9.1.4. Prepare for PLF and tell passenger to put feet and knees together
9.1.5. Tell passenger to use forearms to protect face and neck
9.1.6. Place your hands on the passengers head and bury your face to the side of his head

9.2. Wires

9.2.1. Throw away ripcord

9.2.2. Turn off oxygen

9.2.3. Avoid contact at all cost, even if downwind

9.2.4. Scissor passenger's legs between yours, streamlining pair

9.2.5. If hung up – Remain motionless until power is disconnected

9.2.6. Prepare for PLF and tell student to put feet and knees together

9.2.7. If the chute is hung up and pair is on the ground – Pull cutaway handle

9.2.8. **NOTE:** If time and altitude permit – Unhook RSL and jettison equipment

9.3. Water (Unintentional)

9.3.1. Jettison O2 mask and equipment

9.3.2. Disconnect reserve static line

9.3.3. Release both chest straps

9.3.4. Release passenger's waist quick ejector snaps and remove the shoulder snap locking pins

9.3.5. Inflate any flotation equipment you are carrying

9.3.6. Secure or throw away any handles you may have tucked in the top of your jump suit

9.3.7. Tell passenger that the pair may go underwater initially but should surface with small kicks from the pair

9.3.8. Tell passenger to take a deep breath, cross their arms in front of them, and to prepare for a normal tandem "skid" landing

9.3.9. Turn canopy in wind and slow forward speed

9.3.10. Flare WITHOUT passenger assistance

9.3.11. Release the right toggle so the right hand is free to cutaway parachute (if being dragged)

9.3.12. If dragged – Jettison canopy

9.3.13. After water entry – Unhook the passenger keeping your hands and arms away from the passenger

9.3.14. Release tandem harness and swim free of harness/chute

10. Next Checklist – Jumpmaster Aircraft Inspection Checklist (Page 75)

JUMPMASTER AIRCRAFT INSPECTION CHECKLIST
(Brief/inspect applicable items only)

1. Maintenance Status – Check maintenance records or with flight engineer/loadmaster

2. Aircraft Exterior

2.1. Jump exits – Secure, remove, or tape loose/dangling wires, projections, and sharp edges and objects, which could interfere with jumpers exit

2.2. Chaff/flare dispensers

3. C-130 Aircraft Interior (Refer to T.O. 1C-130A-9)

3.1. Seats/Equipment – Removed or configured

3.2. Safety Belts – Positioned

3.3. Rail sections – Stowed

3.4. Aircraft Floor – Clear and clean

3.5. Paratroop Doors

3.5.1. Doors – Open and close easily. **NOTE:** Leave fully open and pinned during door/jump platform inspection

3.5.2. Door tracks – No excessive grease

3.5.3. Door frames – No sharp edges or protrusions

3.5.4. Auxiliary hydraulic ramp pump handle – Secured (before takeoff)

3.6. Jump Platform

3.6.1. No cracks or bends

3.6.2. Hinge plate slots – Engaged by tie-down studs and screw (with washer) so hinge fittings do not slide off the tie-down studs. **NOTE:** When screw and washer are missing – Hinge plate safety wired with four turns of stainless steal wire to the tie-down bracket

3.6.3. Spring-down lock catches (2 each) – Engages edge of door

3.6.4. Hinge pins – Centered in hinges

3.7. Ramp and Door

3.7.1. Operational

3.7.2. Floor is clean and safe to walk on

3.8. Air Deflectors

3.8.1. Electrical Deflectors – Operational

3.8.2. No items or trash stored in wells

3.9. Jump Caution Lights – Check all seven operational

3.9.1. Set 1 – Crew entrance door

3.9.2. Sets 2 and 3 – Top leading edges of right and left doors

3.9.3. Sets 4 and 5 – Trailing edges of right and left door, waist high

3.9.4. Sets 6 and 7 – Right and left anchor cable aft supports

3.10. Alarm system – Operational

3.11. Anchor Cable System (S/L Only)

3.11.1. **NOTE:** Actual locations and numbers of supports/anchor cables required vary with type of C-130 model used. Refer to TO 1C-130A-9 or check with loadmasters if in doubt about anchor line placement or configuration

3.11.2. Forward support beam

3.11.2.1. U-bolts w/self-locking nuts (or cotter pins) – Properly secured to attaching points

3.11.2.2. Anchor cables – Attached to U-bolts
3.11.2.3. Forward latch assemblies and/or spring-loaded clip – In locked condition
3.11.2.4. Turnbuckle – No more than 3 threads are exposed on either end and locking assemblies are secure with locking pins or safety wired
3.11.3. Anchor cable
3.11.3.1. Broken wires – No more than
3.11.3.1.1. Wrapped type – 3 per inch, per strand or 6 total per two inches
3.11.3.1.2. Woven type – 3 per inch with no more allowed in the next consecutive inch
3.11.3.2. No kinks allowed
3.11.3.3. Cables are not crossed
3.11.3.4. Cables clean and free of rust
3.11.3.5. Cable taught when properly configured through cable supports
3.11.4. Center anchor cable supports
3.11.4.1. Lowered and secured to airframe
3.11.4.2. Quick release pins – Present and operational
3.11.5. Aft anchor cable support
3.11.5.1. Aft latch assembly – Closed. **NOTE:** For tailgating parachutists/ramp bundle drops – Spring loaded clips on aft latch must face outboard
3.11.5.2. U-bolts, nuts, and safety pins – Present
3.11.5.3. Support anchor bolts, nuts, and safety pins – Present
3.11.5.4. Full down and up operation – Checked
3.11.6. Anchor cable stops
3.11.6.1. Tailgating personnel – Position and tape stops at FS 893
3.11.6.2. Combination ramp loads and static line personnel – Position and tape both stops at FS 893
3.11.6.3. RAMZ with freefall parachutists – Position and tape stop at FS 749

WARNING: Do not tailgate static line parachutists with anchor cable stops at FS 749 or FS 773

3.11.7. Static line retrievers
3.11.7.1. CDS retriever arming switches – Safety wired to off (If use not anticipated)
3.11.7.2. Retriever cables/equipment – Ready for use

WARNING: On aircraft with overhead storage racks – Place strip of cloth backed tape over the L-shaped brackets on the aft corner of the right side rack to prevent possible retriever cable entanglement

3.12. Cargo compartment lighting
3.12.1. Loadmaster – Briefed
3.12.2. Lights – Checked and set
3.13. Mission Equipment – Inventoried, positioned, and secured
3.14. Intercom – Available and operational
3.15. JM Kit – Inventoried, positioned, and secured

4. HH-60 Aircraft Interior
4.1. Seats/Equipment – Removed/Configured

4.2. Safety Belts/Gunners Belts – Positioned
4.3. Aircraft Floor – Clear and clean
4.4. Troop seat and tie-down fitting wells – Tape wells in front of doors and any that may snag equipment, jumpers, or static lines
4.5. Doorjambs, cargo door edges, and sharp edges – Tape as necessary. **NOTE:** Tape must not interfere with opening or closing doors in flight
4.6. Weather stripping on cargo door edges (if installed) – Tape as necessary. **NOTE:** Tape must not interfere with opening or closing doors in flight
4.7. Modified anchor line system – Complete, serviceable, and properly installed (Modified quick fit adapter towards front of aircraft for aircraft with aux tanks installed)
4.8. Cargo compartment lighting
4.9. Mission Equipment – Inventoried, positioned, and secured
4.10. Intercom – Available and operational
4.11. JM Kit – Inventoried, positioned, and secured

5. Next Checklist – Jumpmaster Personnel Inspection
5.1. Round – Page 80
5.2. Expanded Round – Page 82
5.3. Static Line Square – Page 90
5.4. Free Fall Square – Page 92
5.5. Expanded Free Fall Square – Page 95
5.6. AMF – Page 104
5.7. Tandem – Page 107

JUMPMASTER PERSONNEL INSPECTION
(ROUND)
(Inspect applicable items only)

1. GENTEX/PASGT (Front)/Protec Helmet

2. Goggles/Face Plate/Face Mask

3. Helmet Lighting

4. Wetsuit/Drysuit

5. Canopy Release Assemblies

6. BC/UDT Vest/LPU's

7. Chest Strap

8. Weapon M-16/GAU-5 and M-203/M-148 (If attached)

9. Waistband

10. Parachute LPU

11. Reserve Parachute

12. Jumper Lighting (Front)

13. Fanny Pack

14. Alice Pack, Harnesses, and Releases

15. HPT Lowering Line

16. Equipment Lighting

17. Equipment Flotation

18. SPUDS

19. Leg Straps

20. Static Line

21. Pack Opening Loop

22. Pack Closing Tie

23. PASGT Helmet (Back)

24. Riser Assemblies

25. Main Pack Tray

26. Diagonal Back Straps

27. Horizontal Back Strap

28. Saddle

29. Fins

30. Special Mission Gear

30.1. Water Deployment/RAMZ gear
30.2. Tree Deployment
30.3. Radios
30.4. Narcotics

EXPANDED JUMPMASTER PERSONNEL INSPECTION
(Round)
(Inspect applicable items only)

1. GENTEX/Protec Helmet – On and secure

2. PASGT Helmet (Front)
2.1. Front and sides – Inspect for sharp edges
2.2. Locking Nuts – Present and secured
2.3. Attaching Clips – Down, visible, and secured
2.4. Pull-the-dot Fastener – Secured. Insure that three of the four plies of nylon run through the snap portion
2.5. Chin Strap and Parachutists Retention Strap – Properly routed and buckled

3. Goggles/Face Plate/Face Mask – Adjusted on and secure

4. Helmet Lighting
4.1. Strobe light – Secured to rear of helmet, light up. Check function
4.2. Additional green chemlite (Night water) – Secured to back of helmet

5. Wetsuit/Drysuit
5.1. Above water temperature 70 degrees F – Optional
5.2. Jacket – Required below water temp 70 degrees F
5.3. Trousers, Hood, Gloves, Booties – Required below water temp 60 degrees F
5.4. Drysuit – Recommended below water temp 40 degrees F

6. Canopy Release Assemblies
6.1. Turn one-quarter turn out and inspect both assemblies for cracked components, free of all foreign matter, and properly assembled
6.2. Water jumps – Open and close canopy releases

7. Personnel Flotation Device
7.1. BC or UDT Vest – Chest strap routed underneath, actuator exposed, relief valve present
7.2. LPU's – Actuators exposed, ensure inflation pockets are not between parachute harness and body

8. Chest Strap
8.1. Check routing
8.2. Inspect for twists, cuts, or frays
8.3. Quick Release – Properly seated

9. Weapon M-16/GAU-5 and M-203/M-148 (If attached)
9.1. Sling – Routed outside of chest strap, over left shoulder, under main lift web, and outside of the buttstock
9.2. Placement – Pistol grip to rear, muzzle down

9.3. Tie Downs – 12 inch, bow-tied from sling to diagonal back strap. **NOTE:** If weapon extends past the knee apply additional 24 inch for leg from front sight
9.4. Waistband – Through carrying handle
9.5. Charging handle, magazine, hand guards, sights, muzzle – Taped/padded (Plastic muzzle cap may be used)
9.6. M-203/M-148 – Taped to hand guard
9.7. M-203/M-148 Muzzle, trigger group, and sights – Removed/taped as necessary

10. Waistband
10.1. Inspect from jumpers' right to left
10.2. Routed over main lift web, under D-rings, with no twists
10.3. Properly routed through adjuster with a two to three finger quick release

11. Parachute LPU – Attached to waist strap

12. Reserve parachute
12.1. Left Connector Snap – Secured, has spring tension, and safety wire is NOT installed
12.2. Right Connector Snap – Secured, does not have spring tension
12.3. Safety Wire – Through right connector hole, attached to lanyard, bent downward, and cannot be pulled out
12.4. Ripcord Grip – Not winterized (As required), right spring band not over ripcord grip
12.5. Steel Swedge Ball – Present/serviceable
12.6. Ripcord Protector flap – Open
12.7. Reserve Pins – Seated, not bent or corroded, cable not frayed
12.8. Ripcord Protector flap – Close
12.9. Pack Opening Spring Bands – No exposed metal on bands, proper routing, and spring tension
12.10. Reserve Pack Tray – No exposed canopy, oil, excessive dirt, or tears
12.11. Raise Reserve – "Hold"

13. Jumper Lighting (Front)
13.1. Red Chemlight – Attached to front of jumper
13.1.1. Attached to D-ring with 80 lb. test tape or rubber band. Bottom of chemlite – Attached to the main lift web using a rubber band/retaining band
13.1.2. Water jumps – Red Chemlight moved to the waistband, next to the life preserver unit (LPU)
13.2. Does not interfere with quick releases or reserve ripcord
13.3. Should not be seen from rear of jumper

14. Fanny Pack – Secure. Zippers closed

15. Alice Pack (H-Harness)
15.1. Right Snap Hook – Checked
15.2. Friction Adapter – 2 to 3 finger quick release, excess secured
15.3. Left Snap Hook – Checked
15.4. Friction Adapter – 2 to 3 finger quick release, excess secured
15.5. Lift Alice Pack – "Hold"
15.6. Retainer Straps – Under frame, crossed, correctly routed through friction adapters

15.7. Friction Adapters – 2 to 3 finger quick release, excess taped and not secured to quick release

16. Alice Pack (Single-point Release)

16.1. Right Snap Hook – Checked

16.2. Attaching Loops – White through triangle, green through white, red through green and grommet of leg strap release

16.3. Release Cable – Through red loop and retainer on leg strap release

16.4. Left Snap Hook and release assembly – Same as above

16.5. Release Handle Assembly – Lanyard attached, lanyard routing

16.6. Equipment Retainer Straps – Front

16.7. Adjustable Cross Strap – Below center pouch, slack removed

16.8. Lift Alice Pack – "Hold"

16.9. Retainer Straps – Under frame

16.10. Shoulder Pack Straps – Adjusted tight, slack secured

16.11. Retainer Straps – Crossed and correctly routed through friction adapters

16.12. Friction Adapters – 2 to 3 finger quick release, excess taped and not secured to quick release

16.13. Leg Straps – Connected, excess in retainer

17. HPT Lowering Line

17.1. Girth Hitch – Around X formed by both retainer straps, not attached to metal frame support.

17.2. Routing – From X, over left shoulder strap to HPT retainer on top left side of pack (Jumpers bottom, left).

17.3. Ejector Snap Routing – Around weapons case (If attached), gate seated towards jumper on lowering line adapter, (If LLA not present, gate may be attached as outermost item on left D-ring, ensure gate is closed).

18. Equipment Lighting – Use the applicable color for the direction of flight

WARNING: Chemlites will be attached in such a manner to allow breaking away from the eyelet or rubber band if entangled by the parachute deployment sequence

19. Equipment Flotation – Secure and serviceable

20. SPUDS

20.1. Gauged 1800psi minimum – Confirm with jumper

20.2. Harness – Secured

20.3. Reserve lever – UP

20.4. Regulator – Attached

20.5. Air valve – ON

20.6. Modified Hose Routing and Serviceability – Checked

20.7. Air Flow and Regulator – Checked and secured

21. Leg Straps

21.1. "Squat". Not twisted, cut, or frayed

21.2. Right Leg Strap – Routed over kit bag

21.3. Right Ejector Snap – Seated
21.4. Left Leg Strap – Routed over the bottom and under the top of exposed kit bag handle
21.5. Left Ejector Snap – Seated
21.6. Kit Bag – Secured with sewn/reinforced portion toward JM
21.7. Tap Parachutist on Thigh – "Recover"

22. Static Line
22.1. Static Line – Route over shoulder
22.2. Snap Hook – Attach to reserve carrying handle
22.3. Safety Wire Lanyard – Attached to looped portion of static line
22.4. Safety Wire
22.4.1. Not too long, short, or excessively bent
22.4.2. Attached to lanyard
22.5. Static Line
22.5.1. Inspect from inside of loop to top of shoulder. "Turn"
22.5.2. Inspect from top of shoulder to first stow
22.5.3. Form a bight and re-stow slack into static line slack retainer
22.5.4. Pull each stow 1 to 2 inches towards the center. Inspect static line and stows from top to bottom

23. Pack Opening Loop
23.1. Ensure last stow is routed from the right
23.2. Ensure pack-opening loop is at 7 o'clock position

24. Pack Closing Tie
24.1. Ensure the 80lb test line goes through the pack-opening loop and all pack closing loops
24.2. Tied at the 5 o'clock position

25. PASGT Helmet (Back)
25.1. Command – "Tilt your head forward"
25.2. Inspect back and sides for sharp edges
25.3. Retention Straps – Routing and security
25.4. Impact Pad – Secured
25.5. Helmet Lighting – Strobe light secured to rear of helmet, light up. Check function

26. Riser Assemblies
26.1. Inspect from Canopy Release Assemblies to Pack Tray
26.2. Routing and security

27. Main Pack Tray
27.1. Inspect from top left corner, counter clockwise around entire pack tray
27.2. Free of oil, mud, dirt, grease, or tear/s
27.3. "Arch your back"

28. Diagonal Back Straps
28.1. Back Strap Retainer Routing – Through sizing channels and around back strap keepers on feed tray

28.2. Pull-the-dot Fasteners – Secure
28.3. Back Straps – Inspect for twists, cuts, or frays
28.4. Inspect right diagonal back strap from adjuster to main lift web

29. Horizontal Back Strap
29.1. "Bend forward at the waist"
29.2. Inspect Horizontal Strap – No twists, cuts, or frays, routed through retainers
29.3. Retainers – Routed through back strap keepers
29.4. Pull-the-dot Fasteners – Secure
29.5. Inspect left diagonal back strap from main lift web to adjuster

30. Saddle
20.1. Inspect from left accessory attachment ring, across jumpers buttocks to right accessory ring
20.2. Signal jumper to recover with a light tap

31. Fins – Secured with Fix-E-Palms or taped

32. Special Mission Gear
32.1. Water Deployment/RAMZ gear
32.1.1. Snorkel and Whistle – Checked
32.1.2. Divers Knife and MK-13 – Secured in fanny pack or on leg as required
32.1.3. ML-4 Kit
32.1.3.1. Secure with quick release on left accessory V-ring
32.1.3.2. Yellow lanyard is attached to the right accessory V-ring
32.2. Tree Deployment
32.2.1. Pararescue Tree Suit – Complete
32.2.2. Gloves – Required
32.2.3. Visor – Required
32.2.4. Let-down Tape – As required
32.3. Radios – Checked and secured
32.4. Narcotics – Checked and secured

JUMPMASTER PERSONNEL INSPECTION
(STATIC LINE SQUARE)
(Inspect applicable items only)

1. Helmet – On/Secured

2. Goggles/Visor

3. SQUARE Assembly
- 3.1. Three ring risers – Connected
- 3.2. RSL – Attached
- 3.3. Cutaway Handle – Secured and Velcro not seated
- 3.4. Reserve Ripcord
  - 3.4.1. Handle in pocket
  - 3.4.2. RSL Routing
  - 3.4.3. Cable routing and travel – Checked
  - 3.4.4. Pins – Checked, cable on left side of pins
- 3.5. Chest Strap – Secured not twisted
- 3.6. Main lift web – Adjusted and stowed
- 3.7. Diagonal Straps – Adjusted and stowed
- 3.8. Leg Straps – Adjusted, gates seated, and slack stowed

4. Altimeter – Set

5. Fanny Pack – Secured, zippers closed

6. Equipment Load/Harness
- 6.1. Quick release(s) – Exposed
- 6.2. Lowering line – Attached, secured, and stowed

7. SPUDS
- 7.1. Secured
- 7.2. Air flow – Checked

8. Weapon(s)
- 8.1. Secured
- 8.2. Weapon – On "SAFE"

9. Static Line
- 9.1. Routing
- 9.2. Container Pins – Safetied
- 9.3. Remove from keeper, close gate, and hand to jumper over shoulder

10. Static Line (Completed prior to final)
- 10.1. Attached to anchor cable
- 10.2. Safety pin – Installed

10.3. Static line – Routing checked, slack stowed

JUMPMASTER PERSONNEL INSPECTION
(FREE FALL SQUARE)
(Inspect applicable items only)

1. Oxygen
1.1. Mask
1.2. Oxygen Block
1.3. AIROX VIII

2. Harness Fit

3. Helmet

4. Goggles/Face Plate

5. Helmet Lighting

6. Wetsuit/Drysuit

7. Right Riser, Three-ring Release, and Cutaway Cable

8. Main Ripcord

9. Cutaway Handle

10. BC/UDT Vest/LPU's

11. Chest Strap

12. Weapon M-16/GAU-5 and M-203/M-148 (If attached)

13. Reserve Ripcord Handle

14. Left Riser, Three-ring Release, and Cutaway Cable

15. Reserve Static Line

16. Jumper Lighting (Front)

17. Combat Pack

18. Equipment Lighting

19. Equipment Flotation

20. Left Main Lift Web

21. Right Main Lift Web

22. Waistband

23. Parachute LPU

24. Kit Bag (If rear mounted)

25. Fanny Pack

26. Right Leg Strap

27. Kit Bag (If front mounted)

28. Left Leg Strap

29. SPUDS

30. Wrist Mounted Altimeter

31. Altimeter Lighting

32. Gloves

33. Jumper Lighting (Rear)

34. Reserve Ripcord Rings and Cable

35. Reserve Ripcord Pins

36. Main Ripcord Pin/s

37. AOD

38. Fins

39. Special Mission Gear

39.1. Water Deployment/RAMZ gear
39.2. Tree Deployment
39.3. Radios
39.4. Narcotics
39.5. HAHO

EXPANDED JUMPMASTER PERSONNEL INSPECTION
(FREE FALL SQUARE)
(Inspect applicable items only)

1. Oxygen

1.1. Mask Fit – Connect bayonet connectors (2 clicks is correct sizing) and inspect. Release left connector
1.2. Mask Internal Components – Cleanliness and proper assembly
1.3. Mask Body – No cracks, excess straps are stowed
1.4. Delivery Tube – Inspect hose from mask to AIROX VIII for kinks, holes, and dry rot
1.5. Quick Disconnect and Valve – Disconnect hose from AIROX VIII, verify spring tension of valve
1.6. O-ring – Present and not upside-down
1.7. AIROX VIII Screen – Lift cover, screen present and free of debris, reconnect hose
1.8. Oxygen Block – Ensure AIROX VIII is locked into the oxygen block fitting
1.9. Pre-breathing Adapter – Verify spring tension of valve, O-ring is present and not upside-down, and screen present and free of debris
1.10. Hose Fitting – Tight and spot paint dot is not broken
1.11. Delivery Hose – Routing between horizontal adjustment strap and waistband, behind back, not kinked, elbow fitting secure
1.12. On/Off Valve – Can be locked in the ON position. Return to OFF position
1.13. Pressure Gauge – Gauge needle is to the right of the number "1" on 1,800
1.14. Bailout System Pouch – Between waistband and flap, waistband extension routed through keepers, hook and pile tabs are secure

2. Harness Fit

2.1. Canopy Releases – Rest evenly in pockets of shoulder
2.2. Harness – Adjust (if necessary) before continuing

3. Helmet

3.1. Helmet – Serviceable
3.2. Chin Strap – Secured

4. Goggles/Face Plate

4.1. Clear of smudges, not cracked, no scratches that will obscure vision
4.2. Straps snug under helmet or secured to helmet

5. Helmet Lighting

5.1. Strobe light – Secured to rear of helmet, light up. Check function
5.2. Additional green chemlite (Night water) – Secured to back of helmet

6. Wetsuit/Drysuit

6.1. Above water temperature 70 degrees F – Optional
6.2. Jacket – Required below water temp 70 degrees F
6.3. Trousers, Hood, Gloves, Booties – Required below water temp 60 degrees F
6.4. Drysuit – Recommended below water temp 40 degrees F

7. Right Riser

7.1. Riser – Not twisted

7.2. Three-ring Release – Properly assembled, turn medium and small rings 1/4 turn. Lift nylon loop and inspect for frays and twists

7.3. Cutaway Cable – Excess stowed in channel

8. Main Ripcord

8.1. Handle – Properly seated

8.2. Swedge Ball/s – Present

8.3. Cable – Not frayed

8.4. Cable Housing – Tacked to protective sleeve

9. Cutaway Handle

9.1. Handle – Mated to hook and pile tape

9.2. Cables – Routed into cable housings and cable housings are tacked

10. BC/UDT Vest/LPU's

10.1. BC or UDT Vest – Chest strap routed underneath, actuator exposed, does not interfere with ripcords or breakaway handle, relief valve present (Recommend using a rubber band to decrease interference with handles)

10.2. LPU's – Actuators exposed, ensure inflation pockets are not between parachute harness and body

11. Chest Strap – Not twisted, properly routed through friction adapter, and excess strap stowed

12. Weapon M-16/GAU-5 and M-203/M-148 (If attached)

12.1. Sling – Routed outside of chest strap, over left shoulder, under main lift web, and around outside of the buttstock

12.2. Tie-down – Attached to the sling and weapon tie-down loop with a bow knot

12.3. Taping – Muzzle, front sight (if M-16), hand guards, magazine and ejector port, charging handle

12.4. Weapon Position – Rotated pistol grip to rear, between waistband and parachutist.

12.5. M-203/M-148 – Taped to hand guard

12.6. M-203/M-148 Muzzle, trigger group, and sights – Removed/taped as necessary

13. Reserve Ripcord Handle

13.1. Handle – Properly seated

13.2. Swedge Ball/s – Present

13.3. Cable – Routed free and clear of reserve static line and cutaway cable housing, not frayed

13.4. Cable Housing – Tacked to protective sleeve

14. Left Riser

14.1. Riser – Not twisted

14.2. Three-ring Release – Properly assembled, turn medium and small rings 1/4 turn. Lift nylon loop and inspect for frays and twists

14.3. Cutaway Cable – Excess stowed in channel

15. Reserve Static Line

15.1. Quick Release – Secured

15.2. Loop End of Static Line – On brass marine fitting

15.3. Static Line – Free and clear of cutaway cable housing

16. Jumper Lighting (Front)

16.1. Red Chemlight – Attached to front of jumper

16.1.1. Attached to D-ring with 80 lb. test tape or rubber band. Bottom of chemlite – Attached to the main lift web using a rubber band/retaining band

16.1.2. Water jumps – Red Chemlight moved to the waistband, next to the life preserver unit (LPU)

16.2. Does not interfere with ripcords or quick releases

16.3. Should not be seen from rear of jumper

17. Combat Pack

17.1. Quick Releases – Attached to equipment rings

17.2. Attaching Straps – Routed to the outside of all other equipment

17.3. Modified H-harness or Sling – Properly assembled

17.4. Lowering Line – Attached to right V-ring, outside of front mounted kit bag, and excess stowed in retainer pocket.

WARNING: All rear-mounted packs with frames will be lowered to prevent injury

17.5. Retainer Pocket – Secured to pack frame (Right side for front mount, left side for rear mount) with two retainer bands. Additional double looped retainer band around the middle

17.6. Girth Hitch – Secured to harness/sling and not pack frame

17.7. Combat Pack Shoulder Straps – Snug around parachutists legs, quick-ejector releases taped to preclude inadvertent release in free fall

18. Equipment Lighting – Use the applicable color for the direction of flight

WARNING: Chemlites will be attached in such a manner to allow breaking away from the eyelet or rubber band if entangled by the parachute deployment sequence

19. Equipment Flotation – Secure and serviceable

20. Left Main Lift Web – Not twisted, excess stowed

21. Right Main Lift Web – Not twisted, excess stowed

22. Waistband

22.1. Inspect from right to left, waistband behind rucksack

22.2. Not twisted, properly routed through friction adapter, and excess strap stowed

23. Parachute LPU – Attached to waist strap

24. Kit Bag (If rear mounted) – Ensure waistband is through both handles on right side of jumpers' back

25. Fanny Pack – Secure. Zippers closed

26. Right Leg Strap
- 26.1. Not twisted
- 26.2. Snap Hook Gate – Has spring tension and is closed

27. Kit Bag (If front mounted) – Ensure one leg strap is through both handles.

28. Left Leg Strap
- 28.1. Not twisted
- 28.2. Snap Hook Gate – Has spring tension and is closed

29. SPUDS
- 29.1. Gauged 1800psi minimum – Confirm with jumper
- 29.2. Harness – Secured
- 29.3. Reserve lever – UP
- 29.4. Regulator – Attached
- 29.5. Air valve – ON
- 29.6. Modified Hose Routing and Serviceability – Checked
- 29.7. Air Flow and Regulator – Checked and Secured

30. Wrist Mounted Altimeter
- 30.1. Altimeter – SET
- 30.2. Tap dial to see if needle is frozen
- 30.3. Altimeter Lighting – As required
- 30.4. "Turn"

31. Gloves

32. Jumper Lighting (Rear) (W)
- 32.1. Green Chemlight – Attached to parachute carrying handle w/80 lb. test tape
- 32.2. Centered on the protective flap for the reserve ripcord pins

WARNING: Attempt to use as little 80 lb. test tape as necessary and trim excess tail, to prevent entanglement with reserve bridle cord (in the event of reserve parachute deployment)
- 32.3. Local manufactured plastic container with Velcro to flap may be used
- 32.4. Rubber band – Around the protective flap securing the chemlite
- 32.5. Should not be seen from front of jumper

33. Reserve Ripcord Rings and Cable
- 33.1. Reserve Protective Flap – Open
- 33.2. Reserve Ripcord Cable Housing – Tacked

33.3. Reserve Static-line Ring – Around reserve ripcord cable and above fixed guide ring (Little-ring – Big-ring)
33.4. Cable – Moves freely in cable housing, and is routed to the left side of the top grommet

34. Reserve Ripcord Pins
34.1. Top pin – At a 45-degree angle to the cable
34.2. Both Pins – Fully seated, Do not push the raised edge of the ripcord pins on top of the grommets. The pins must be fully seated with no slack in the ripcord cable between the top and bottom pins
34.3. Reserve Protective Flap – Close.

35. Main Ripcord Pin/s
35.1. Main Container – Ensure flaps are closed in proper order (Bottom, left, right, top)
35.2. Main Ripcord Protective Flap – Open
35.3. Main Ripcord Pin/s – Properly seated. Do not push the raised edge of the ripcord pins on top of the grommets
35.4. Closing Loop – Coreless type III nylon and is not frayed
35.5. Main Ripcord Cable – No frays
35.6. Cable Housing – Tacked

36. AOD
36.1. Withdrawal Hook – Routed around pin between closing loop and ripcord cable. Ensure it is attached to pin and not cable
36.2. Knurled Nut – Tightened with at least three threads showing
36.3. AOD Power Cable – Inspect for frays. Does not cross the main ripcord cable
36.4. Rubber Washer – Present
36.5. Locking Key – Attached to stiffener plate
36.6. Power Cable Housing – Inspect from stiffener plate to stow pocket
36.7. Main Ripcord Protective Flap – Close
36.8. Knurled Locking Nut – Ensure tight to base of AOD
36.9. Arming Pin – Present and locked with spring tension
36.10. Stow Pocket Straps and Snaps – Inspect secure
36.11. Reset Indicator – Aligned
36.12. Millibar Setting – SET

37. Fins – Secured with Fix-E-Palms or taped

38. Special Mission Gear
38.1. Water Deployment/RAMZ gear
38.1.1. Mask, Snorkel, and Whistle – Checked
38.1.2. Divers Knife and MK-13 – Secured in fanny pack or on leg as required
38.1.3. ML-4 Kit
38.1.3.1. Secure with quick release on left accessory V-ring
38.1.3.2. Yellow lanyard is attached to the right accessory V-ring
38.2. Tree Deployment
38.2.1. Pararescue Tree Suit – Complete
38.2.2. Gloves – Required

38.2.3. Visor – Required
38.2.4. Let-down Tape – As required
38.3. Radios – Checked and secured
38.4. Narcotics – Checked and secured
38.5. HAHO
38.5.1. Helmet with communications
38.5.1.1. Radio – ON
38.5.1.2. Frequency – SET
38.5.1.3. Comm Check – Accomplished
38.5.2. Compass – Checked
38.5.3. NVG's – Secured as required
38.5.4. Navigator and/or Team Leader
38.5.4.1. HAHO Compass Board – Serviceable, secured to combat pack/waist strap as required
38.5.4.2. Maps and Map Protectors – Secured
38.5.4.3. GPS – Serviceable and secured

JUMPMASTER PERSONNEL INSPECTION
(AMF)
(Inspect applicable items only)

1. Harness Fit

2. Helmet

3. Goggles/Face Plate

4. Helmet Lighting

5. Right Riser, Three-ring Release, and Cutaway Cable

6. Cutaway Handle

7. Chest Strap

8. Reserve Ripcord Handle

9. Left Riser, Three-ring Release, and Cutaway Cable

10. Reserve Static Line

11. Jumper Lighting (Front)

12. Left Main Lift Web

13. Right Main Lift Web

14. Waistband

15. Kit Bag (If rear mounted). NOTE: For I rigs with leg strap mounted hand deploy

16. Fanny Pack

17. Right Leg Strap

18. Leg Strap Hand Deploy Pilot Chute
18.1. Secure in pocket – Handle exposed
18.2. Bridle – Properly routed

19. Kit Bag (If front mounted). NOTE: For I rigs with rear mounted hand deploy

20. Left Leg Strap

21. Wrist Mounted Altimeter

22. Altimeter Lighting

23. Gloves

24. Jumper Lighting (Rear)

25. AOD – Set and Activated

26. Reserve Ripcord Rings and Cable

27. Reserve Ripcord Pins

28. Rear Mounted Hand Deploy Pilot Chute
- 28.1. Secure in pocket – Handle exposed
- 28.2. Bridle – Properly routed

29. Main Ripcord Pin/s

30. Special Mission Gear
- 30.1. Camera's
- 30.2. Radios
- 30.3. Audible altimeter

JUMPMASTER PERSONNEL INSPECTION
(TANDEM)
(Inspect applicable items only)

1. Pilot and Passenger Equipment
- 1.1. Head protection – On and secure
- 1.2. Eye protection – Available
- 1.3. Passenger Jumpsuit – Tight fitting
- 1.4. Altimeter – Calibrated and secure (Pilot only)
  - 1.4.1. Visual
  - 1.4.2. Audible
- 1.5. Gloves
- 1.6. Flotation Equipment – Actuator(s) exposed

2. Tandem Pilot Assembly
- 2.1. Three ring risers – Connected
- 2.2. Cutaway handle – Exposed, cables not twisted
- 2.3. Drogue
  - 2.3.1. Handle – Exposed
  - 2.3.2. Pin – Checked
- 2.4. Drogue releases – Exposed and secured
- 2.5. Reserve Ripcord
  - 2.5.1. Pin – Checked
  - 2.5.2. Reserve Ripcord and RSL Cable – Cable routing not crossed
  - 2.5.3. RSL routing/connected
  - 2.5.4. Handle – Exposed
- 2.6. CYPRES AAD – Activated
- 2.7. Chest Strap – Secure not twisted
- 2.8. Leg straps – Secure not twisted

3. Tandem Passenger Assembly
- 3.1. Harness – Adjusted
- 3.2. Quick ejector waist straps – Adjusted to full length of travel and clipped to back of passenger harness
- 3.3. Shoulder snap – Below level of shoulder on passenger's back, locking pin not installed
- 3.4. Chest Strap – Secure not twisted
- 3.5. Leg Straps – Secure not twisted

4. Passenger Hook-Up (Completed at discretion of pilot but will be completed prior to assuming final altitude)
- 4.1. Shoulder Snaps – Connected and pinned
- 4.2. Waist Straps – Connected and excess stowed
- 4.3. Locate handles
  - 4.3.1. Cutaway
  - 4.3.2. Reserve
  - 4.3.3. Primary Drogue Release
  - 4.3.4. Secondary Drogue Release

4.3.5. Drogue

5. Final Check (Completed prior to assuming final)

5.1. Shoulder Snaps – Connected and pinned
5.2. Waist Straps – Connected and excess stowed
5.3. Cutaway Handle – Checked
5.4. Reserve Handle – Checked
5.5. Primary Drogue Release – Checked
5.6. Secondary Drogue Release – Checked
5.7. Drogue Handle – Checked

RAMZ
(Brief applicable items only)

1. RAMZ Package Night Lighting Requirements

1.1. 3 green chemlites per side – 2 high, 1 low
1.2. 1 green chemlite – Type IV link
1.3. Strobe light – Support web near the inflation lanyard

2. Exit procedures

2.1. 1st jumper will exit 6 seconds after RAMZ deployment but not before the package D-bag is retrieved
2.2. 3500' AWL and above
2.2.1. 1st jumper – 5 sec. delay
2.2.2. 2nd jumper – 3 sec. delay
2.2.3. Rest of the jumpers – Clear and pull
2.3. 3000' – 3500' AWL – All jumpers clear and pull

3. De-rigging Procedures

3.1. RAMZ – Orient to inflation position
3.2. Type IV release – Release (insure D-rings are free and clear)
3.3. Starboard quick release – Release
3.4. Stern quick release – Release
3.5. A-22 container (Diaper and sling from package) – Remove. **CAUTION:** Failure to remove straps may result in severe damage to the boat
3.6. Compressed air tank valve handle – Turn counter clockwise
3.7. Enter boat immediately
3.8. Equipment attached to engine box – Disconnect
3.9. Compressed air tank quick-disconnect – Release
3.10. Engine retainer strap – Release
3.11. Tilt engine and remove honeycomb (box/container should fall away)

4. Engine De-watering Procedures

4.1. Throttle grip – Turn to SHIFT (☂•) position or slower
4.2. Shift lever – Neutral
4.3. Drain valve – Drain
4.4. Tilt/run lever – Tilt
4.5. Engine – Tilt to full tilt position
4.6. Starter handle – Pull slowly until engine turns over 2 or 3 revolutions
4.7. Tilt/run lever – Run
4.8. Engine – Lower
4.9. Starter handle – Pull about 10 times
4.10. Fuel line – Connect
4.11. Primer bulb – Pump until firm, then squeeze 2 or 3 more times
4.12. Throttle grip – Turn to START (↻) position
4.13. Primer knob – Pull through full stroke twice, leave in WARM-UP position (color line showing)
4.14. Starter handle – Pull until engine starts. **CAUTION:** Allow starter cord to rewind before releasing starter handle

WARNING: Ensure propeller is clear prior to starting engine

5. After Engine Starts

5.1. Water pump indicator – Check for steady stream of water. **CAUTION:** If water pump indicator is not discharging stream – STOP the engine and refer check for overheating

5.2. Operate engine for a minimum of 15 minutes in gear (40 minutes minimum preferred)

5.3. After engine has run for 30 seconds – Push drain valve to RUN position. **CAUTION:** Do not run engine at full throttle with drain valve in DRAIN position

5.4. After engine has warmed up – Push primer knob to RUN (no color line) position

THOMAS C. WASKOW, Major General, USAF
Director of Air & Space Operations